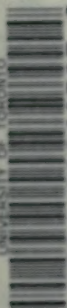


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ONTARIO

CANADA



ONTARIO

Farming

Dairying

Fruit-Growing

Forests

Mines

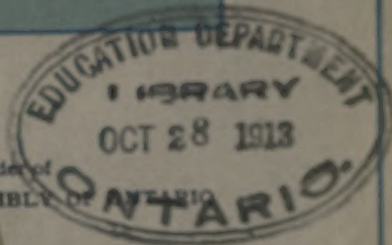
Fisheries

Manufactures

Education

SPLENDID OPPORTUNITIES

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1913



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THE HON. SIR JAMES P. WHITNEY, K.C.M.G.,
Prime Minister of Ontario.

THE
PROVINCE
OF
ONTARIO
CANADA

Prepared by direction of the Honourable James S. Duff,
Minister of Agriculture for the Province
of Ontario, 1913



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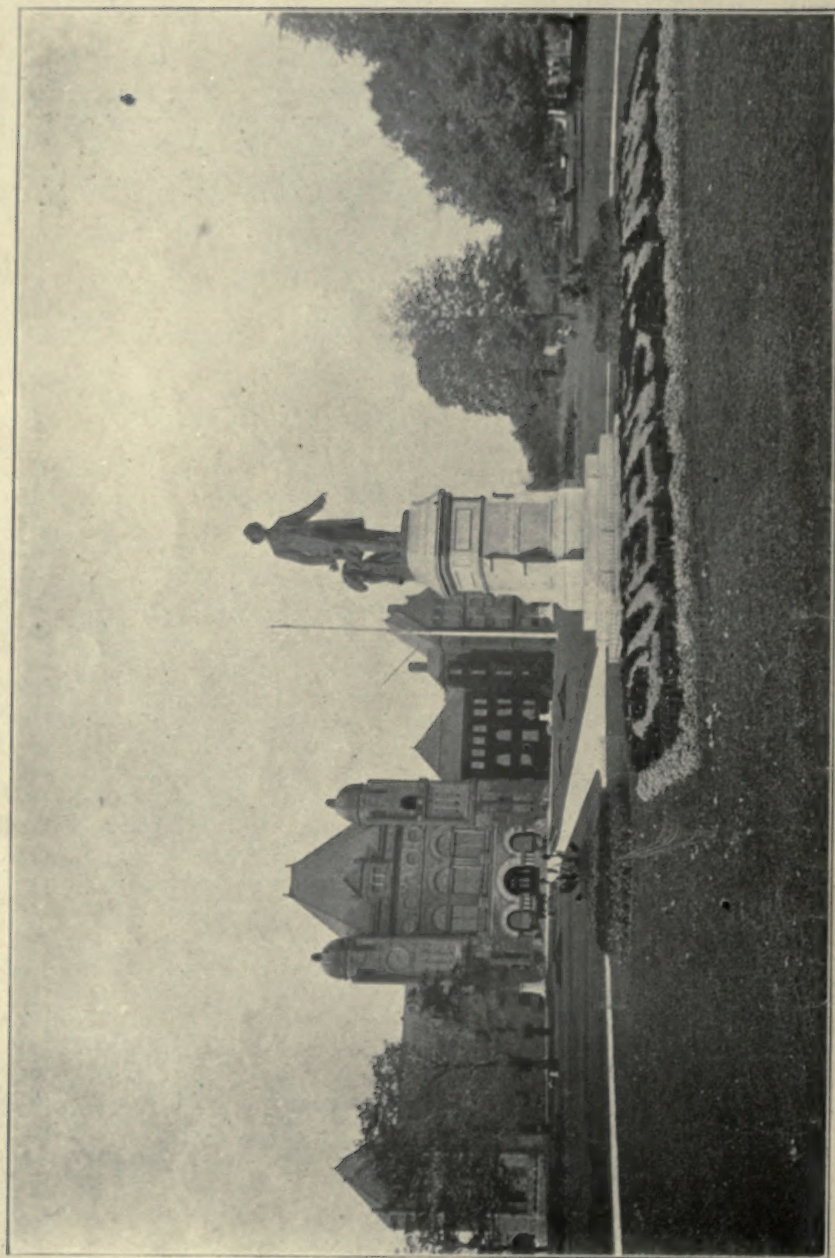


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Parliament Buildings, Toronto.



ONTARIO



MAGNITUDE.

Ontario is one of the largest of the nine provinces of Canada.

It is limited on the east by James Bay and the Province of Quebec; on the west by the Province of Manitoba; on the south by the River St. Lawrence, the Great Lakes, and the State of Minnesota; and on the north by Hudson Bay.

The Province has an estimated area of 407,262 square miles. Its greatest extent from north to south is 1,075 miles, and from east to west 1,000 miles. Measured by the Canadian Pacific Railway from east to north-west it is 1,285 miles. Larger than the largest of the prairie provinces by 155,430 square miles, it is fully three and a third times the size of the British Isles, and is almost twice the size of either France or Germany.

Ontario is divided into two great sections: Southern Ontario, the older settled portion, with an area of 77,000 square miles; and Northern Ontario, 330,000 square miles. The two sections as land are only in small part co-terminous, practically from Mattawa, on the Ottawa, to Georgian Bay. While Southern Ontario begins about forty-eight miles west of Montreal, Northern Ontario lies north of a line commencing at Mattawa, 266 miles farther west, and running westward and north-westward along the north shores of Georgian Bay, the North Channel and Lake Superior, and along the United States boundary to Manitoba.

NATURAL FEATURES.

Running roughly from east to west through Northern Ontario is the Laurentian region of rocks, valleys, lakelets, and muskegs or peaty swamps. This physical feature forms the divide or water-parting for the drainage of the province. On the south side is the basin of the St. Lawrence, with its tributary, the Ottawa. On the north side is the basin of the rivers flowing into James and Hudson bays.

In that part of the St. Lawrence basin south of Lake Nipissing is the triangular peninsula of Southern Ontario. Generally of clay loam or sandy loam, that area is undulating in surface; rich and retentive in soil; good in natural drainage; plentiful in pure spring water; and, as adjacent to the Great Lakes, abundant in rain. The soil is capable of yielding a great diversity of the best products, pasture grasses for live stock, all kinds of cereals, a wide range of vegetables, many kinds of apples, and the finest of other fruits, such as the grape and the peach. For varied and high-class agriculture the conditions are ideal.

In the basin of the rivers flowing north of the Laurentian plateau is an area of many million acres of as fine farming land as that of Southern Ontario, and in some ways more favoured than the dead level clay stretches of Manitoba. This is the Great Clay Belt of Northern Ontario. Of a much lower altitude, and with a better climate than the Laurentian range, that area is finely adapted for the production of cereals, vegetables and grasses, for dairying, and the raising of live stock. Cultivated in small part, the country meantime is mainly a vast and valuable region of forests mottled with splendid mineral areas, the home of the lumberman and the lure of the miner. It is also a country of lakes, countless lakelets, and many magnificent streams. (Write for free handbook, "Northern Ontario," to the Director of Colonization, Parliament Buildings, Toronto, Canada, or to the Ontario Government Agent, 163, Strand, London, England.)



Niagara Falls.



Gateway to the Lake of Biwa, G.Y.E.

CLIMATE.

OLD ONTARIO.

To give in a sentence or two of general terms the climate of a province which is over 1,000 miles in greatest length by 1,000 miles in greatest breadth, is to run the risk of being either indefinite or misleading. The country must be taken piecemeal, yet the pieces must be very large. Southern or Old Ontario, though large in itself, is by far the smaller section of the two great subdivisions of the province. Its climate is beautiful. With the exception of an occasional hot few days, the summer, in the more southerly parts, is perfect. The fall is delightful. The winter, particularly midwinter, is dry, very cold, and exhilarating. And the late winter slush and the spring glide into warm weather quickly. There are long intervals of unclouded sky, and no fogs. The clear atmosphere and brilliant blue expanse above are a charm to people from the humid climate of the Old Land. Summer and fall recreations, such as hunting, fishing and canoeing, are an irresistible allurements, and winter sports are glorious. In short, the climate is conducive to agricultural prosperity, to enjoyment, and to strength.

Summer extends from early in June till towards the end of September; autumn from late in September to the end of November; winter from December to the end of March; and spring from April till the commencing days of June. The warmest months are July and August; the coldest are December, January, and February.

The average amount of bright sunshine for the year, as shown by six stations, is 1,920 hours out of a possible of 4,457. The greatest amount is in June, July and August; the least is in November, December and January.

The highest temperatures at Toronto in July for a period of thirty years averaged 90.9 degrees; the lowest, 48.4, and the monthly mean, 68.8; the highest in February averaged 44.2; the lowest, 8 below zero, and the monthly mean 21. The highest at Ottawa (256 miles north-east) in July averaged 90.8; the lowest, 47.9, and the monthly mean 68.7; the highest in February averaged 40.3; the lowest, 20.7 below zero, and the monthly mean 12.6.



Holiday Seekers at Jackson's Point, Lake Simcoe



Tobogganing in High Park, Toronto.

Speaking of the climate of Old Ontario in its different months, Mr. Stupart, Director Dominion Observatory, writes: "In April, vegetation makes rapid progress, and before the end of the month the trees are partially in leaf. Temperatures of 70 degrees and over are sometimes recorded. May is almost invariably a very delightful month, with a mean temperature ranging between 52° and 55°, and by the last week all trees are in full leaf. The summer months are decidedly warm, with much sunshine and very few rainy days, most of the precipitation falling in showers or thunderstorms which give sufficient moisture to the rapidly ripening crops. With September come the first indications of autumn, with cool nights; but it is seldom that ground frosts occur until October, which, with its superb weather and glorious autumn tints, is one of the finest months of the year. November, with shortening days, is often wet; but snow rarely falls until December, when the winter sets in with blustery weather and heavy snowfalls, sometimes followed by cold spells, during which the temperature may fall to zero or lower. January and February are truly winter, and the ground is usually snow-covered. With March come signs of spring; in most years all snow has disappeared by the middle of the month, and by the end the trees are beginning to bud."

The chief differences between the north and the south of Old Ontario in winter are that the snowfall is slightly heavier and the temperature lower and less variable in the former than in the latter. In the other months the differences of temperature lessen, Rockliffe and Stoney Creek being the chief extremes. Dealing with differences in greater detail, Mr. Stupart says: (1) "In the valleys of the Ottawa and the Upper St. Lawrence we find a moderately cold winter, but a singularly exhilarating, bracing atmosphere makes even a zero temperature by no means unpleasant. Signs of spring are not wanting early in April, and by the beginning of May foliage is well advanced, and then follows a decidedly warm summer. The whole of this region is, between the middle of May and middle of September, included between the same isotherms as the greater portion of France, and, after a protracted autumn, winter sets in again before December." (2) "In the peninsula of Ontario, or that portion of the province which lies east of Lake Huron and north of Lake Erie and the western portion of Lake Ontario, the winters are by no means severe, and the summers are

seldom oppressively hot; this being due to the tempering influence of the lakes by which this portion of Ontario is surrounded." (3) "In the western counties the April mean temperature corresponds nearly to that of southern Scotland, and in May the mean temperature of the whole district is slightly higher than for the south of England. The temperature conditions during the summer months may, as in the Ottawa and St. Lawrence valleys, be compared with those of France; the normal mean temperature for July ranging between 66° and 72°. September and October are generally delightful months, and snow seldom remains on the ground until well on in December, except on the high lands of the interior counties." (4) "That portion of Ontario which lies immediately east of the Georgian Bay, the District of Muskoka, at an elevation of 740 feet above the sea, abounding in small lakes, possesses a wonderfully bracing atmosphere which, with a very high percentage of bright sunshine and a pleasant temperature, has made this region a summer resort much frequented by people from the cities and towns farther south."



On the Muskoka River, G.T.R.

The rainfall is adequate and is well distributed throughout the year. The average for thirty years is 24.09 inches of rain and 73.2 inches of snow. With ten inches of snow as equal to one inch of rain, the total annual precipitation would be the equivalent of 31.38 inches of rain. The rainfall of Old Ontario from May to October inclusive averages about 23.4 inches per month, being a little heavier in the former part of this season than in the latter; the north or Parry Sound excepted, where it is heaviest in September and October. It is slightly greater in the south-western section than in the other parts in spring and early summer.

The snowfall is heaviest in January and February. In each of these months the average fall is 16 inches in the central section, and 14 inches in the south-western. The snowfall in the north and north-west sections is heaviest in December, January and February, being in each month a little more than 20 inches. Beyond an occasional fleeting flurry in either of the two months, no snow falls in Old Ontario from May to October inclusive.

The winter is not uniformly cold throughout. Periods of low temperature become longer and more intense until midwinter, after which they decrease gradually until spring. These cold periods of two or three days' duration are due to north winds, and are always moderated by a change of wind. A warm south wind now and again causes a thaw, and a portion of the snow disappears, so that an excessive accumulation of snow is usually prevented. These variations are not so marked in the north, and its climate is more equable.

The direction of the wind, as so far indicated, governs the climate to a great extent. Winds from certain quarters greatly influence the seasons in their variation from each other. The prevailing winds are from the west. As they pass over the Great Lakes their coldness is moderated in winter and their heat in summer. Hot winds from the south are similarly tempered. Damage from wind storms is uncommon.

The Great Lakes have an influence apart from altitude, although the latter has a minor effect. They remain comparatively warm during the winter and have a greater effect in tempering the climate of places on the shores than of those inland, the difference being fairly large.



Grapes, Figs, Peaches, Niagara District

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On the Muskoka River, G.T.R.

Averages of Temperature for Thirty Years.

Showing for each month the monthly average for the highest, lowest and mean temperature at the principal stations in Old Ontario, derived from the thirty years, 1882-1911, also the annual mean at each station for the same period.

Month.	Southampton.	Bram.	London.	Woodstock.	Stoney Creek.	Toronto.	Lindsay.	Gavenhurst.	Ottawa.	Rockcliffe.
Jan. { Highest	45.1	46.5	46.8	46.8	51.2	45.3	41.9	41.0	40.4	38.4
Lowest	-6.6	-8.8	-9.3	-11.0	-4.5	-7.7	-20.1	-20.9	-20.9	-33.9
Monthly mean	21.1	21.3	21.6	20.2	25.5	22.1	15.9	14.2	11.1	6.5
Feb. { Highest	44.4	46.7	46.1	45.3	48.0	44.2	42.0	42.0	40.3	41.7
Lowest	-10.7	-11.7	-11.5	-11.4	-6.1	-8.0	-18.2	-27.5	-20.7	-35.0
Monthly mean	19.4	19.9	20.0	19.3	23.0	21.9	15.5	13.9	12.0	10.2
Mar. { Highest	54.2	58.2	58.5	56.3	60.1	54.4	51.4	50.7	48.0	50.8
Lowest	-2.8	-1.5	-0.5	-1.3	5.7	4.0	-6.3	-13.4	-8.1	-25.9
Monthly mean	24.9	29.2	29.5	27.9	32.7	29.4	25.3	23.6	23.9	20.3
April { Highest	72.7	76.3	75.9	74.4	76.9	71.0	73.9	71.0	73.3	73.6
Lowest	10.7	17.7	18.3	16.9	22.6	20.8	13.6	10.5	14.8	6.1
Monthly mean	40.3	43.1	42.9	42.1	44.5	42.4	41.4	39.5	41.0	38.5
May { Highest	80.1	82.3	82.7	81.2	84.8	79.3	82.6	81.3	82.9	84.2
Lowest	28.3	29.0	23.5	28.7	33.3	31.7	27.9	26.9	28.9	23.8
Monthly mean	51.3	54.9	55.5	53.8	55.2	53.6	54.1	52.5	55.0	51.5
June { Highest	85.3	88.1	88.2	87.2	91.8	87.3	88.6	87.0	88.0	89.1
Lowest	37.6	37.7	38.2	38.5	42.4	42.7	39.2	36.6	41.1	33.5
Monthly mean	60.9	64.4	64.1	63.6	66.2	64.1	63.8	62.7	64.9	61.8
July { Highest	87.3	92.0	91.9	90.1	95.5	90.9	91.5	89.3	90.8	91.3
Lowest	43.5	43.0	43.9	44.0	48.8	48.4	44.0	42.9	47.9	40.3
Monthly mean	65.1	68.6	69.8	67.2	71.8	68.8	67.7	66.8	68.7	65.5
Aug. { Highest	86.2	89.6	89.9	88.5	93.2	88.1	89.4	87.5	88.2	87.7
Lowest	41.9	42.1	40.7	41.8	46.4	46.6	40.6	39.3	43.8	37.4
Monthly mean	64.6	66.4	66.2	64.8	69.4	65.1	65.4	64.4	65.9	62.6
Sept. { Highest	84.7	86.7	86.3	85.5	90.4	84.6	85.8	83.6	84.1	83.9
Lowest	34.1	33.8	31.9	31.5	36.6	36.7	31.7	31.1	33.4	29.1
Monthly mean	59.0	60.7	60.5	58.8	63.2	60.2	58.2	57.6	58.1	55.4
Oct. { Highest	74.2	75.5	75.4	74.2	77.4	72.7	73.9	72.3	70.8	73.0
Lowest	25.1	24.7	23.4	23.2	25.9	26.0	21.1	21.2	23.5	17.4
Monthly mean	47.7	48.6	47.9	46.6	50.9	48.0	45.8	45.7	45.3	43.1
Nov. { Highest	61.1	62.4	61.9	61.4	65.4	59.8	59.1	58.5	57.1	55.7
Lowest	14.1	13.0	12.7	11.3	17.3	14.9	5.8	7.1	6.8	-0.4
Monthly mean	36.7	36.6	36.6	35.3	39.4	37.1	33.3	33.1	31.9	29.3
Dec. { Highest	49.2	48.4	53.3	48.8	53.5	48.0	44.6	44.4	42.3	44.5
Lowest	0.0	-0.8	-2.2	-3.2	-1.5	-1.5	-13.3	-14.3	-15.4	-25.7
Monthly mean	26.7	26.2	26.3	24.9	29.2	27.1	21.0	20.7	17.0	14.0
Annual mean	43.1	45.0	45.1	43.7	47.6	44.9	42.3	41.2	41.3	39.2

CLIMATE OF OLD ONTARIO

11

Rain and Snow.

Monthly summary of inches of rain and snow for precipitation in the several districts of Old Ontario, average derived from the thirty years, 1882-1911.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
West and Southwest:													
Rain.....	1.14	1.73	1.34	1.29	3.39	5.84	8.31	8.20	8.30	5.14	5.39	6.16	61.75
Snow.....	16.5	16.5	5.7	5.6	.....	.....	.....	.....	.....	8.1	8.2	15.2	75.3
Northwest and North:													
Rain.....	6.79	6.86	6.97	1.55	1.97	3.18	5.58	6.25	6.89	4.89	1.89	6.39	61.51
Snow.....	11.1	16.4	16.5	6.6	9.5	.....	.....	.....	.....	1.5	17.8	15.6	96.1
Centre:													
Rain.....	1.98	6.96	1.21	1.86	2.81	3.75	3.86	3.86	3.16	5.05	2.89	1.39	61.14
Snow.....	17.5	16.1	9.4	5.7	.....	.....	.....	.....	.....	7.6	6.7	17.5	65.5
East and Northeast:													
Rain.....	6.21	6.67	1.16	1.36	5.6	3.78	3.86	3.96	3.56	3.75	1.81	1.16	75.07
Snow.....	19.2	16.8	10.8	5.2	9.1	.....	.....	.....	.....	6.5	1.5	16.1	116.1
The Provinces:													
Rain.....	.96	.84	1.19	1.71	5.5	5.7	7.65	6.47	6.28	5.49	3.69	1.49	76.08
Snow.....	19.3	16.5	10.5	5.7	9.3	.....	.....	.....	.....	6.6	1.7	16.3	116.1

Sunshine.

The hours the sun was above the horizon at Ottawa, and the hours of bright sunshine at the principal stations in Old Ontario.

Station.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Sun above horizon at Ottawa.....	285	289	372	495	436	467	495	426	478	408	285	378	4,411
Bathurst.....	57	86	168	181	367	346	365	326	185	115	27	68	1,311
Woodstock.....	61	89	175	177	367	346	378	308	185	136	75	64	1,369
Toronto.....	76	106	186	191	318	369	365	315	166	127	61	66	1,569
London.....	77	101	156	186	316	311	366	306	166	144	75	67	1,395
Kingston.....	16	69	145	185	311	227	17	165	166	127	76	68	1,364
Ottawa.....	83	116	145	186	377	236	366	346	177	115	78	66	1,777
Average of above stations.....	71	106	146	185	314	346	366	346	187	126	73	68	1,369



NEW ONTARIO.

Covering an area of 330,000 square miles and extending 770 miles from north to south, this vast territory in relation to climate can only be dealt with imperfectly. Generally speaking, the summers are warm and the winters very cold and bracing. The climate of the portion lying north of Lakes Superior and Huron differs considerably from the part east of Lake Huron and north of Lakes Erie and Ontario, especially in winter, when the former portion, in addition to being farther north, is less affected by the tempering influence of the Great Lakes. The winters are distinctly severe, but as the tables for Moose Factory, Abitibi and Haileybury indicate, the summers are warm. These places respectively are 534 miles, 368 miles and 264 miles north of Toronto. The mean temperature at Moose Factory in January is 25° lower, and at Haileybury 15° lower than at Toronto; but as the spring advances the differences become less, until in May they are respectively 10° and 2° lower, and in July 6° and 2° lower. The average daily maxima temperatures at Moose Factory and Fort Hope (300 miles westward) for July and August are 74° and 70° , as against 77° and 73° at Haileybury, which latter temperatures are almost the same as at Toronto. The temperature is considerably lower in the far north in June than at Haileybury and Toronto, and the nights are cooler all through the summer. The average winter temperature at Lake Nipissing and Haileybury is several degrees lower than at Montreal; and at Abitibi and Moose Factory, respectively 105 and 263 miles north of Haileybury, it is very nearly the same as in Manitoba. Temperatures of over 80° are not infrequent in Northern Ontario, and 90° and over usually occur several times each summer.

The total annual precipitation near Lakes Nipissing and Timiskaming is nearly the same as in Southern Ontario; but northward this diminishes somewhat, the rainfall becoming less and the snowfall greater.

The great fertile Clay Belt is far from being in the extreme north of the province: it lies in the southern portion of Northern Ontario. Having longer hours of sunlight than in Old Ontario, the crops are correspondingly benefited, and the time of harvest in north and south tends to be equalized.



Camping at Pither's Point, C.N.R.



Moose, Rainy Lake, C.N.R.



Rainy Lake District, C.N.R.



Falls on the Wahnapitae,



French River, C.N.R.

From Haileybury, Timiskaming, in the east, the testimony is: "The climate is particularly healthful; the winters are perhaps a little longer than in older Ontario, but the air is more clear and invigorating."

From Hymers, Thunder Bay, in the west, the story is: "A climate and soil that will grow some of the finest roots, grasses, grains and vegetables in the world."

From Kenora, the farthest west district: "The climate on the whole is perfect; sometimes cold, but always dry in winter, and long, bright sunshiny days in summer; very warm and plenty of rain; also cool nights." And from the same district: "Shelter from the cold winds in winter is abundant." "We don't have the heavy gales in the spring and fall they have on the open prairie."

Tables showing the average mean highest, mean lowest, and the mean temperature; also the highest and lowest temperature on record, and the average precipitation.

Haileybury, Timiskaming—Quebec Boundary.

1895-1911—16 years.

	Temperature.				Absolute.		No. days R. or S.	Rain fall.	Snow fall.	Total Precip.
	Mean High.	Mean Low.	Mean.	Daily Range.	Max.	Min.				
January.....	17.7	-4.3	6.7	22.0	48	-10	16	0.32	17.2	9.04
February.....	19.8	-2.9	8.5	22.7	47	-38	12	0.24	17.4	1.98
March.....	32.1	8.3	11.9	23.8	71	-34	13	0.51	17.2	2.23
April.....	48.3	26.3	37.3	22.0	79	-3	16	1.26	5.8	1.84
May.....	61.6	39.0	50.3	22.6	93	17	14	3.14	0.8	3.32
June.....	70.7	50.2	60.6	20.5	100	28	12	3.03		3.03
July.....	76.7	55.4	66.0	21.3	99	36	14	3.91		3.91
August.....	73.0	51.8	62.4	21.2	93	27	12	2.63		2.63
September.....	65.1	44.4	54.7	20.7	91	24	15	3.52		3.52
October.....	54.2	32.9	42.5	17.3	80	13	14	2.43	2.8	2.71
November.....	35.3	20.9	28.1	14.4	63	-25	15	0.94	13.1	2.35
December.....	31.0	3.2	12.1	18.2	47	-35	17	0.42	19.8	2.40
								22.36	94.0	31.77

Av. date last frost, June 5th.

Av. date first frost, September 11th.

Abitibi-Quebec Boundary.

1897 to 1906—Saguenay. Temp. 41.2°
2 max. 65.2°

	Temperature.				Absolute.		No. days E. or W.	Rain- fall.	Snow- fall.	Total Frost.
	Mean High.	Mean Low.	Mean.	Daily Range.	Max.	Min.				
January.....	12.5	-11.5	5.5	33.5	44	-40	8	5.30	15.0	1.50
February.....	14.5	-11.0	7.5	35.5	46	-44	7	5.00	15.5	1.40
March.....	28.5	5.5	14.5	36.0	51	-39	1	5.00	20.0	0.50
April.....	48.5	21.0	30.5	19.5	56	-25	5	5.50	4.5	1.00
May.....	54.5	30.4	35.2	18.1	64	8	5	5.80	5.0	0.50
June.....	62.5	40.0	48.5	18.5	64	28	6	5.45		0.40
July.....	72.5	50.0	59.5	17.1	64	31	24	5.75		0.75
August.....	68.5	48.0	58.5	16.5	66	34	10	5.80		0.50
September.....	61.5	44.0	50.5	15.5	67	30	15	5.40		0.60
October.....	47.5	30.4	35.5	15.4	59	21	27	5.60	4.4	0.80
November.....	31.1	18.5	24.5	13.5	65	-20	11	6.75	15.5	2.50
December.....	16.0	-1.4	7.5	15.5	46	-40	8	6.00	20.5	3.00
			33.4		64	31			55.5	17.00

Average date of last frost, June 25th.

Average date of first frost, September 1st.

Kenora, Kenora District—Manitoba Boundary. 10 years.

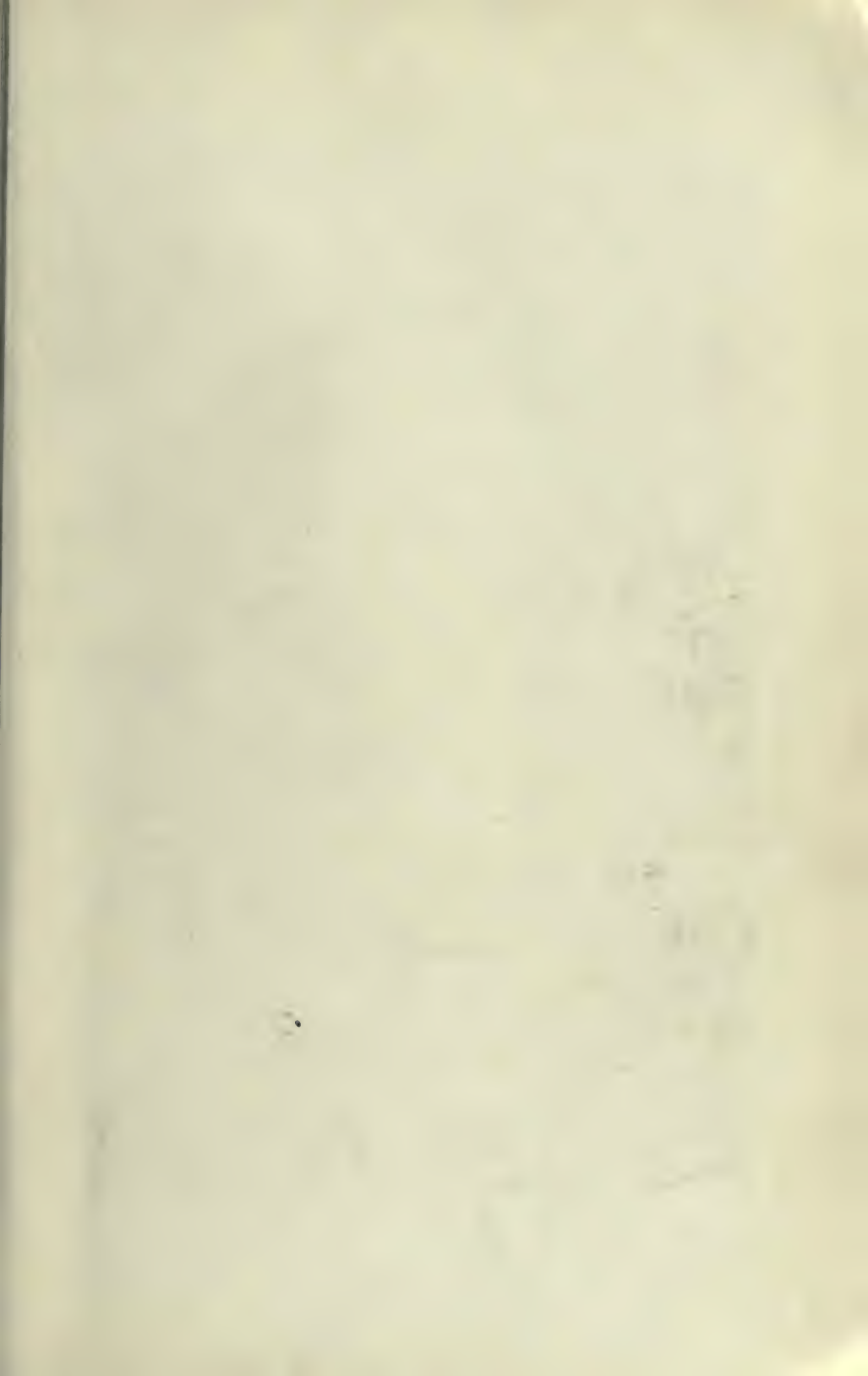
	Temperature.				Absolute.		Precipitation.		
	Mean High.	Mean Low.	Mean.	Daily Range.	Max.	Min.	Rain.	Snow.	Total.
January.....	16.7	-1.5	7.5	17.9	44	-44	5.00	24.5	1.00
February.....	17.5	-5.4	5.5	21.5	46	-39	5.00	5.5	0.50
March.....	28.5	5.5	19.5	26.4	51	-30	5.50	5.5	0.50
April.....	46.5	16.4	30.5	19.8	60	-4	5.25	5.5	1.50
May.....	56.4	28.5	40.1	20.5	64	10	5.25	5.5	1.50
June.....	71.5	50.5	61.4	21.1	69	20	5.75		0.50
July.....	76.7	56.4	66.5	20.1	64	41	5.25		0.50
August.....	74.5	52.5	60.5	20.5	66	37	5.75		0.75
September.....	64.5	46.4	55.5	17.8	68	20	5.25	5.5	0.50
October.....	49.5	30.5	41.5	15.4	58	8	5.40		1.00
November.....	35.5	17.5	25.5	11.5	60	-10	5.00	5.5	1.50
December.....	14.5	1.5	7.5	16.4	47	-30	5.55	14.5	1.50
							54.05	56.1	25.14

Average date last frost, May 15th.

Average date first frost, October 15th.



Ontario Farms.





THE HON. JAMES S. DUFF,
Minister of Agriculture for Ontario.

AGRICULTURE.

Promise.

The Province of Ontario, though great in forests, minerals, water powers and manufactures, is chiefly agricultural. Possessed of much excellent soil, the minor proportion of which is under cultivation, and a fine climate, suited to a wide variety of products, the Province is just at the beginning of development. By careful progressive farming, the section already cultivated, mainly in Old Ontario, might easily be doubled, perhaps trebled, in productive value. And when to this section is added the vast uncultivated area of fertile land in New Ontario, the future of the Province is bright with promise, pointing to the sustenance of millions.

Areas.

There are thirteen and a half million acres of land under cultivation, over fourteen million acres are cleared, and fully twenty-four and a half million acres are assessed. But when it is considered that there are at least two hundred and thirty million acres of land surface in the Province, the area of arable land may be inferred to be many million acres more than the portion already cultivated. Beyond this cultivated portion (a few small spots excepted), Northern Ontario contains twenty million acres of alluvial soil, or one of the greatest expanses of fertile territory to be found in the world. And this does not include the vast stretches of agricultural land south and west of James Bay.

Values.

The agricultural interests of the settled parts of the Province, that is, of Old Ontario, with a fringe of the new section, are second to none of any province or state of equal size on the continent of America. Over this area it is the most peopled, best developed, and richest Province of the Dominion. There are 175,000 farms whose value ranges from low figures up to \$50,000 and over. The value of farm lands, buildings, implements and live stock is fully \$1,405,000,000. The annual agricultural production is \$300,000,000. In value of field crops for 1912 (Dominion census), Ontario far exceeded any of the other provinces of Canada, and the two best prairie provinces by \$26,000,000.

Progress.

The progress of agriculture during the past decade is manifest. The total value of farm lands, buildings, implements, and live stock on hand in 1912 showed an increase over 1903 of \$319,128,855, or fully 29 per cent. Field crops showed an increase of \$49,132,534, or more than 36 per cent. Live stock (including poultry), sold or killed, showed an increase over 1903 of \$25,651,408, or fully 43 per cent.

During the past fifteen years the percentage of increase in these three classifications was respectively 52, 68, and 146 per cent.



The Hon. Adam Beck and his Prize-winning Pair.

MIXED FARMING.

The Province has been for many years devoted to general agriculture or mixed farming. The average farmer combines the growing of grain, roots and grasses; the raising and feeding of live stock, including poultry; the production of milk for the home dairy, the cheese or butter factory, or towns and cities; and the cultivation of a few acres of orchard. He has learned the wisdom of transforming his grain, root and fodder crops into live stock and animal products—beef, bacon and fowl, and the various dairy foods. Thus his industry yields a larger cash return, farm labour is better distributed, and the productiveness of the soil is preserved; and this means the permanent prosperity of an agricultural community. If Ontario, still great in grain growing, is no longer a great grain exporter, but consumes its surplus locally, the lesson learned must very soon be taken to heart by the western provinces in order to mitigate trouble over exhausted soils and periodic labour problems. Dr. J. G. Rutherford, late Veterinary Director-General and Live Stock Commissioner, says: "Land is land the world over, and although there are in these provinces some very considerable areas of remarkably fertile soil, there are other and much more extensive areas in which this condition cannot truthfully be said to exist. Even the richest lands eventually become exhausted unless care is taken to maintain their fertility by the advantage of sane methods of cultivation, while in the case of those of medium or inferior strength the period of profitable continuous cropping is, of course, much more limited. The wonderful tales of the undiminished fertility of western soils after producing successive crops of wheat for decades are in most cases incapable of proof, although it may be admitted that in some few localities the soil has shown itself able to withstand wonderfully well the unfair treatment accorded to it. Exceptions, however, only prove the rule, and the history of wheat cultivation on this continent furnishes the best possible argument against the short-sighted methods of so-called farming now too generally in vogue in the Canadian west. We need not hesitate in making the somewhat sweeping statement that unless the farmers of western Canada as a body decide, and that at an early day, to modify their present methods by the adoption of mixed husbandry, and especially by the ex-

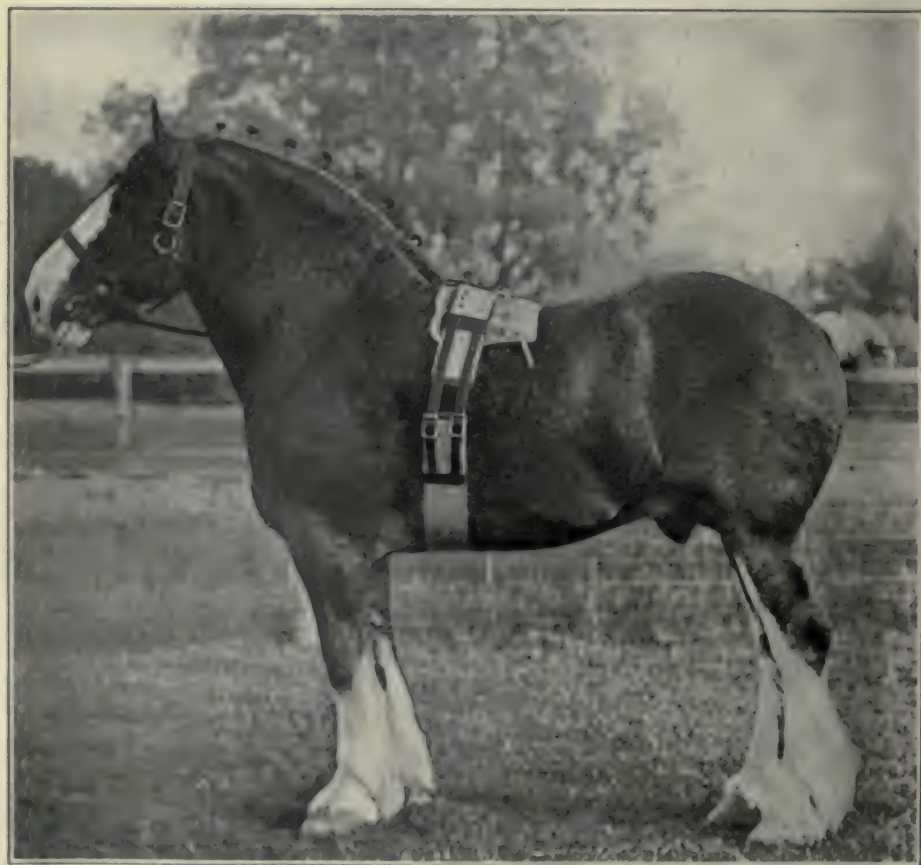


1. Prize Jerseys. 3. Prize Cows. 4. Prize Cattle at Canadian National Exhibition.

tensive keeping of live stock, they, as well as those interdependent with them on the basic industry of agriculture, or, in other words, practically the whole community will inevitably experience a very serious and more or less prolonged period of financial depression. It is true that so long as the price of grain is maintained at or near its present high level, and the seasons are reasonably propitious, the crops obtained from the new lands still to be exploited will probably avert anything like a general monetary stringency, but this circumstance will not convey much comfort to the individual farmer whose land is then no longer capable of remunerative production, and who finds himself compelled either to abandon the struggle or to undertake the slow and painful task of restoring to the soil those precious elements which might so easily have been conserved by the timely adoption of common-sense methods." Sir William Whyte says: "The market is regulated by demand and supply. When the supply is small the price rises. When it is large the price falls. When Canadian farmers pour grain in great volume into Liverpool the natural result follows—the British miller goes into hiding. It is admitted that, owing to the flooding of the market, the western farmer this year (1912) lost 10c. per bushel, and probably more. I have never lost an opportunity to point out the seriousness of this situation, and emphasize the statement of the need for a change. Our farmers are still devoting themselves almost exclusively to the production of wheat, and it is exceedingly difficult, although some progress has already been made, to bring about a change. At the present time plans are being laid for a special propaganda work to persuade our farmers to go more largely into mixed farming, and to follow a system of rotation of crop. The time may come, in the course of a very few years, if we persist in growing wheat, when the supply will greatly exceed the demand, with the inevitable result. This fact must be carefully considered, and our western farmers understand that it is necessary to produce the commodity for which there will be a keen demand."

Having long ago abandoned the riskful and "shortsighted methods of so-called farming" generally followed on the prairie, and having adopted the sane and common-sense methods of permanent agricultural success and prosperity, Ontario has developed into pre-eminence three great branches of farming—dairying, stock-raising, and fruit growing. These are not scattered at random,

The prevalence of any one branch or a combination of branches in a particular locality is largely due to climate, soil and other features. Diverged thus into different channels of activity, the farmers of Ontario produce the commodities for which there is a keen demand; they are independent of special market conditions, and are enabled to live, if need be, largely within their own resources.



Clydesdale.

DAIRYING.

There is a notion that the Northwest is the only part of the Dominion worth living in, but when dairying and other interests are considered it becomes evident that Ontario is one of the most fertile and inviting provinces in Canada.

Front Rank.—The dairy industry of the Province continues to be recognized as in the front rank, if not the first place, in the many important branches of its agriculture. When the product of cheese factories and creameries, the milk delivered in towns and cities, and the butter made and consumed upon the farm are all included in dairying, there is probably a total which exceeds any other line of industry. And when coupled with pork production, its natural complement, the probability is strengthened that it is the most extensive and profitable industry in the Province of Ontario.

Progress.—If a survey be taken of conditions as they were twenty years ago, or twelve, or even five, it will be seen that there is progress, and a wider survey will reveal it as great. Progress in quantity and quality of product and in price and demand is real.

Quantity.—The comparison as to quantity is made here with a number of years, 1911 having been a year of great heat and dry pastures. In his report, "The Outlook for Dairying in Ontario," January, 1913, J. A. Ruddick, Dairy Commissioner, says: "Ontario is the only other province for which we have any comparative figures of production. In the 1911 Report of the Bureau of Industries for the Province we find that with a decrease of exactly 100 in number of cheese factories in operation and a decrease of 106,000 cows, the production of cheese has increased since 1908 by over 6,000,000 pounds, and the output of creamery butter has increased to the extent of nearly 4,000,000 pounds, or about 50 per cent., during the same period. Taking these facts together there is a fair assumption that there has been a very marked improvement in the annual yield of milk per cow. Of course, there is nothing to show how much the above increase may be due to a diversion of milk or cream from the farm dairy to the cheese factory or creamery, but we have proof from other sources of such improvement, and I feel that I am justified in giving some credit for the satisfactory condition of things to the cow-testing movement." (This movement is dealt with in

its own place farther on.) The decrease in number of cows was due to the scarcity of farm labour, thus compelling their disposal.

Quality.—The quality of dairy goods may be judged from the following statements: "These prices were made possible by the fact that we had in the Province of Ontario an efficient lot of makers, and I think they should be congratulated on the excellence of the standard which they have been able to maintain, and the general uniformity which characterizes Ontario goods at the present time."—G. A. Putnam, Director of Dairying for Ontario. "On the whole I think the quality has been better than the previous year."—J. A. McKergow, Produce Merchants' Association, Montreal. "I visited most of the large cheese centres of Britain and saw cheese from nearly every part of Canada, and had the privilege of comparing them with the cheese made in the Old Country, and with cheese from other countries as well, and it will be pleasing for you to know that our best cheese compared very favourably with the best makes from other countries. The type of cheese in greatest demand in the Old Country is practically our own best type of cheese. The type that was being sold for the highest price, in practically all the shops I visited, was a mild flavoured, close, smooth cutting, meaty cheese, just such a quality as is shown in the prize-winning cheese at this exhibition. I found that our best cheese were sold right along with the best English and Scotch cheese."—G. G. Publow, Chief Dairy Instructor for Eastern Ontario, at Western Ontario Dairymen's Convention, January, 1912.

Price.—The advance in price is marked. "The past season (1911) was a somewhat peculiar one. In the early part of the season we had a slump in prices, especially in butter, which made us wonder if we had reached the limit of production; but the market quickly recovered, and such times as these only go to show how sure a foundation the dairy industry rests on, as before the end of the season we reached the highest prices on record. These high prices were, no doubt, partially brought about by unfavourable conditions for production in both England and New Zealand, as well as in some sections of our own Province. But the real reason was that consumers will have dairy products of good quality. On the whole, the dairy situation is in a most healthy condition, and there need be no fear of increasing the production, as all dairy pro-



Agnes Cow. Record: 26,724 lbs. milk and 774 lbs. butter fat in one year.

ducts are likely to find ready sale at remunerative prices."—President Waddell, at Western Ontario Dairymen's Convention, January, 1912. "The prices for cheese have probably been higher during the past season than at any time in the history of the trade. Unfavourable climatic conditions in England and elsewhere brought about a shortage of dairy products, consequently the demand for Canadian cheese and butter has been unusually active at prices that have made the season profitable to producers, irrespective of dry pastures and a lessened milk supply. The Old Country took a considerable portion of our surplus butter, and with the growing demand in the Western Provinces, in addition to local consumption, prices during the latter part of the season were exceptionally high. For the early part of the season prices were not so encouraging, owing to the prospect of a heavy output of butter without many signs of a profitable outlet. Although the production of butter has been largely increased, the market has been able to absorb the amount at good average prices for the season."—Director's Report, Western Ontario Dairymen's Convention, January, 1912. "Prices going up and the yield of milk increasing—profits increasing at both ends."—J. A. Ruddick, January, 1913.

Demand.—The demand for dairy products is on the increase, notwithstanding the fact that there is a distinct decline in the export trade. C. Marker, Calgary, Alberta, a delegate to the Western Ontario Dairymen's Convention, January, 1912, said: "I am glad to see that the dairy industry is making good progress in Ontario. It is gratifying to us in the West, because we feel that the demand of the army of consumers is increasing out there much faster than the local supply, and I can assure you that in the West you will find a market that will appreciate and pay for quality." Speaking of Canada as a whole, J. A. Ruddick, in his report, January, 1913, says: "The decrease in our exports during recent years has led many people to think that the dairying industry in Canada is on the decline, or at best not making any progress. The farmers have been blamed in some quarters for their lack of enterprise. The Governments have been urged to 'do something' to have the so-called reproach removed from Canadian agriculture, and so on. These are superficial views of the situation, and opposed to them I make the assertion that there *has been as much increase in milk production, taking Canada as a whole, during the past decade as*

there was during any other similar decade in the history of our industry. Our estimate of the situation is often wrong, because we fail to realize the quantity it takes to provide an increased population of say two and a half million people with milk and milk products, nor have we taken into account some new demands which have lately arisen. In one way or other Canadians are consuming between thirty and forty million dollars' worth a year more of dairy products than they did ten years ago." The increased demand has been not only for creamery and dairy butter, but for sweet cream and ice cream, which are consumed in the towns and cities. The sale of milk in this connection is one of the most remunerative lines in Ontario, and the demand is growing. For example, a large distributing dairy in Toronto receives 950 cans, holding 82½ pounds each, of whole cream milk per day; while a departmental store disposes of 1,056 gallons of milk and 912 of sweet cream per week, and manufactures into butter 472,000 gallons of sour cream per year. The demand in the larger towns and cities of the Province is so great that they are reaching far out for supplies. "If we add," says Mr. Ruddick, speaking of Canada, "to this increased consumption of butter and cream, the enormous increase in the quantity of milk required for home use, to say nothing of the condensed milk business, we do not find it difficult to account for a lack of growth or even the decline in our export trade. I am satisfied that our home consumption of milk and its products is now easily up to the \$100,000,000 mark." The home trade is now at least five or six times as large as the export trade, and is becoming more important. It is increasing enormously, say at the rate of \$2,000,000 every year. The year 1903 saw the beginning of that marvellous increase of population and expansion of home trade which has checked the growth of our total foreign trade in dairy products. The new conditions, however, have not affected in the same degree the trade in cheese as in butter, the former being considerably less used as a food compared with the universal use of the latter, which is considered a necessity. Thus, although the dairying industry of Canada will have a share of the international trade for many years to come, the most important market by far is undoubtedly at home.

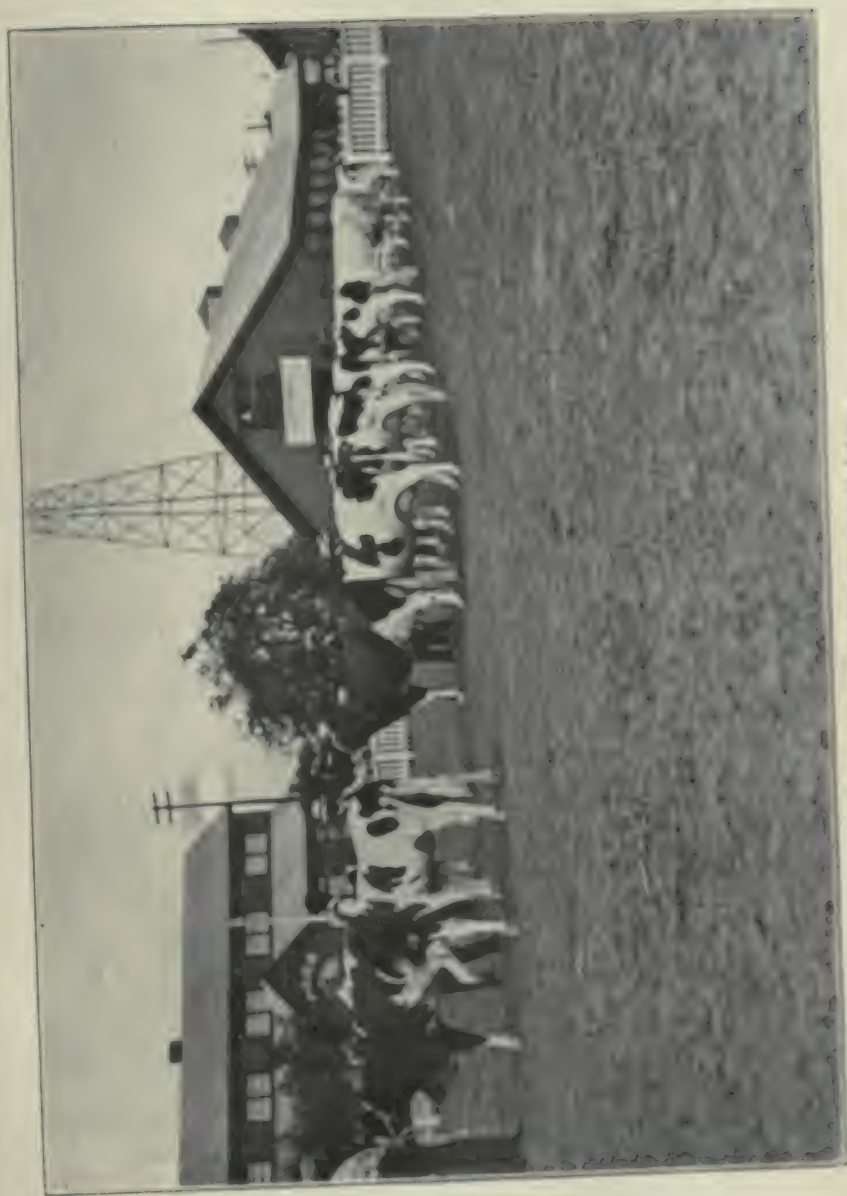
Export.—The total exports of dairy produce for 12 months ending March 31st, 1912 and 1913 respectively, were as follows (see Trade and Navigation, unrevised):—

	1912		1913	
Cheese.....	lbs., 163,450,684	\$20,888,818	lbs., 155,216,392	\$20,697,144
Butter.....	" 9,744,492	2,077,916	" 878,223	223,578
Cream.....	" 1,021,197	38,302	" 349,865	15,342
Milk and Cream (condensed)	" 4,389,350	305,678	" 335,849	25,564
Milk (fresh).....	gals., 7,771	975	gals., 7,939	1,412
Cream (fresh).....	" 886,266	792,687	" 820,360	751,123
	\$24,104,376		\$21,714,165	

The export of butter from Canada for the year ending March 31st, 1913, was much less than the import, the latter being 7,989,269 pounds, valued at \$2,081,989. Canada must, therefore, be regarded as among the butter importing countries of the world. On the other hand, the import of cheese into Great Britain represented Canada as being 89,550,832 pounds above New Zealand, its closest competitor. (See Statement of Trade and Commerce.)

Production.—Now when it is observed that considerably over half the cheese manufactured in the Dominion is the product of Ontario, it is obvious that the Province holds a large place in the general dairying industry of Canada. In 1911 there were 1,077 cheese factories, which used 1,369,856,680 pounds of milk in the production of 127,123,016 pounds of cheese, valued at \$15,491,406; 157 butter plants at cheese factories, which made 1,063,768 pounds of butter, valued at \$491,448; and 120 creameries, which made 13,738,203 pounds of butter, valued at \$3,268,303. The estimated value of butter made in farm dairies, and of milk consumed on the farm, sent to condensed milk factories and supplied to towns and cities, is about \$15,000,000. Thus a conservative estimate of the total value of dairy products of Ontario for the year 1911 would be \$34,000,000, and for 1912 easily \$2,000,000 more.

Cheese Factories and Creameries.—Cheese and, to a less extent, butter are manufactured under the co-operative or factory system. The factories are for the most part managed by men trained in dairy schools, and all are directed by government instructors. They are established nearly everywhere in the Province. Material improvement has been made in recent years in their appliances and sanitary conditions. Recent legislation requiring registration of cheese factories and the taking out of certificates by makers has led to greater care in the factory and higher efficiency in the work.



Holstein, Canadian National Exhibition

Permanent certificates have been granted only to makers of marked capability, while one year certificates are granted to others. The decrease in cheese production is due to the increased demand for milk in the towns and cities. The cheese is exported chiefly to the British Isles.

Dairy Stables.—The farmer cannot pass from imperfect conditions and methods all at once: it takes at least a few years. He cannot quickly equal the stables and equipment of the majority of farmers that are producing certified milk. But he need not wait until able to build a model barn. The average farmer's immediate necessity is what is practicable. He can reasonably and gradually improve his possessions and methods. An increasing number of farmers are installing stables floored with cement; stalls (minus mangers) of sufficient dimension, with a gutter behind; seeing to bright windows and abundant ventilation; and keeping the interior always clean, and whitewashed at least once a year. When the stable is thus made comfortable and sanitary the welfare and profit of the dairy cow surely follows. The coolest water at hand, where there is no ice, will preserve the milk in good condition. The expense of these desirable conditions is very small. Along the lines of judicious use of existing conditions and of gradual improvement distinct progress and success are attained in Ontario.

Milking Machines.—A large number of these machines are already used in Canada. They encourage the keeping of more cows where the number of milkers is limited. They mitigate the labour difficulties and other conditions connected with milk production. For small herds they are not likely to be used, but they are very practicable for herds of 20 or 25 cows and over. A more general use of the milking machine would be an undoubted advantage.

Silos.—The monolithic or solid wall concrete silo, if air-tight and rigid, is much to be recommended for simplicity, cheapness and durability. Made thus, or of wood or steel, these simple but valuable structures are dotted all over the Province. Stored with silage, they prevent the compulsory sale of stock at a sacrifice in the winter time. And there is nothing on the farm that brings in so much ready cash as this provision for a little extra feed to the cow during the trying heat of summer. Silage is an ideal feed to put dry cows into good heart and flesh, and they must be fed when dry if they are to progress after freshening. It is not perfect alone,

but with other feed there is nothing of greater value, and it is looked upon as the most economical food on Ontario farms. The corn crop never fails. Alfalfa yields a most valuable crop and is unequalled for milk production, but when it is made into ensilage there is a good deal of loss.

Cow Testing.—The fundamental principle of this work is that each cow in the herd shall be known by its milk record in both quantity and quality. In many herds it is found that one good cow yields more profit than five or six combined. Based upon records, the unprofitable animal is eliminated and the profitable retained. The principle has been earnestly applied by many farmers, and is becoming general throughout the Province. It is revolutionary; on the one hand, saving much wasted human energy, and, on the other, directing it successfully. C. F. Whitley, Dairy Commission Staff, Ottawa, says:—"As the proof of the pudding is in the eating, so, fortunately, the value of cow testing is quickly tested in every district where dairymen have been bright enough to adopt it. Results are not insignificant, they are striking; not measured in ounces, but in tons; not counted by fractions of cents, but by hundreds of dollars; they are not fiction, though they sometimes approach the semblance of miracles; they are sober, hard-pan facts. An increase of from 70 per cent. up to 300 per cent. is here shown in each of the six herds," tested respectively in the six provinces. "Our results established cow testing as one of the best time-saving and labour-saving propositions ever placed before Canadian dairymen. For the investment of one little dollar in scales men are now receiving \$20 through the increased production, besides the intense satisfaction of knowing that they are milking none but profitable cows. Probably no work on the farm pays greater profits. The simple fact is that there is a sum of over \$20,000,000 per year lying dormant in undeveloped cow quality. A good slice of that is yours" in Ontario. Indeed, this is an underestimate, as later cow-testing proves. The milk records of 300 of the poorest cows in Ontario were compared with those of 300 of the best, and it was found that there was a difference of over 2,000,000 pounds of milk, or a profit of \$64 per good cow as compared with 33 cents per bad one, showing that each of the best herd was equal to 195 of the worst! Thus the extra revenue to Ontario alone could easily be \$12,000,000, and possibly \$24,000,000. Cow-testing is in truth a bed-rock principle, worthy of universal application.

Feeding.—A careful watch and record of feed is also essential. Increase in food consumption, which should be without forcing and waste, will probably yield an increase in milk production. Other conditions equal, the greater the feeding capacity of the cow the greater the profit. It is just a question of the ratio of feed to milk returns that makes the difference in efficiency as between different cows. But the value of such returns is not always in the best agreement with the cost of feeding. There may be no more return-value from a dear feed than from a cheap. The question of cost in the production of fodder must be determined by the capabilities of the particular farm. The difference in the cost of feeding a cow of high yield and one of low is generally small, and this has a prime bearing on cow-testing in order to weeding out the bad cow in the herd.

Breeding.—Another great essential is ancestry, or pure breeding. But above pedigree, the test for any breed should be milk production. The "scrub" cow, even if pure bred, should be weeded out at once, as should the "scrub" bull, whether pure bred or not.

Farmers are realizing that the proper principles of cow-testing, weeding, feeding and breeding, in order to improvement of the dairy herd in yield and quality of milk are all-important, and that these principles can be carried out without great cost.

Dairy Instruction.—A number of specialists are sent out by the Provincial Department of Agriculture to factories and creameries during the season of manufacture to assist the makers in producing cheese and butter of a better and more uniform quality, to inspect sanitary conditions, and to give instruction to patrons in the care and handling of raw material. This scheme of dairy instruction, including factory meetings, district dairy meetings, annual conventions, and the distribution of literature, has brought about a great improvement and has put millions of dollars into the pockets of the dairy farmers.

General Success.—Dairying yields much success to the man that farms upon a large scale and to the man of 50 or 100 acres. There is nothing that pays better than milk and butter-fat produced upon the farm. And though creameries and cheese factories go on increasing the requirement for milk, the demand for good dairy butter will remain. A capable, industrious farmer can make dairying profitable with comparatively little expense. Beginning with a few

good cows, he can maintain and improve a herd at a minimum of cost. The man that secures or breeds the best dairy cows and feeds them with the balanced ration of his own farm, is the man that makes money in dairying to-day.

The Outlook.—With the high prices which have prevailed and are likely to continue, the farmer may look forward with every hope of success. The large cities, with increasing population, are going out farther and farther for cream and milk, the demand being so great as to encroach upon the rapid expansion of the manufacture of cheese, and to make it almost certain that high prices will continue. The outlook is very bright for Ontario dairying.



Grand Champion Jersey Herd at Canadian National Exhibition, Toronto, and other large Fairs, in 1912.



Prize Hunter at Canadian National Exhibition.
Prize Stallions at Guelph Winter Fair.



Clydesdales.

LIVE STOCK.

The Province of Ontario is acknowledged to be the home and nursery of live stock for Canada and for a large part of America. Its commanding position, invigorating climate, fertile soil, pure water, nutritive grasses, grains and roots, advanced state of agriculture, and character of people guarantee that this high rank is more than likely to be upheld. Not that the quality of its animals has yet reached the standard that is desirable. Rather, the Province is advancing toward the ideal, which is to make the live stock industry the right arm of a successful agriculture. The "manufacture" of high-class animals and a wide variety are the conditions of prosperity. The quality of Ontario live stock is not only being maintained, but greatly improving every year, through the importation of large numbers of first-class horses, cattle, and sheep, of both sexes. In addition, the improvement in all branches of Canadian-bred pedigreed stock during the past few years is very great, and this indicates that Ontario is destined to remain the principal supply ground for other provinces and beyond. Operating a modern-equipped and well managed stock farm is not drudgery, but legitimate enjoyable work: the intelligent care of good animals, which is one of the most attractive pursuits in the world. The business is not only one of fascinating interest, but carries with it substantial profits as well. Ontario is bound to become, and is becoming, every year more and more a live stock producing province, but the man who attempts to put his raw products, such as coarse grains and fodders, upon the market, and at the same time rob and impoverish his land, is gradually getting poorer as the years go by. An authority, visiting the State of Illinois, says: "You may imagine my astonishment when I was told that the great, growing State of Illinois, largely caused by the reduction they have made there in producing stock during the last ten years, only gave an average of 28 bushels per acre of corn, whereas the Province of Ontario, in its two or three corn-growing counties, gave an average of 76 bushels." Why? Because they are doing away with the live stock, and they are at the same time doing away with and reducing the productiveness of the land. That is what we have to guard against. My past experience prompts me to say to you here to-day: 'Aim, above all things, to keep up the productiveness of your farms, and in so doing your daily labour and yearly toil will give double the return that otherwise would be the case.'"

Prizes in Live Stock.—"I think," says an authority, "the Ontario breeders and farmers as a community, as far back as you want to go, are the best judges of quality and conformation of all classes of horses that you will find in any country you wish to visit; and this is proved by the fact that when they make up their minds they can take a string of horses anywhere, and come back with a large proportion of prizes."

At the Guelph Winter Fair, December, 1911, the Hon. Adam Beck said: "It must be gratifying to us to know that in the twenty-three classes at the New York Show, where we were in competition with the Belgians, the best that Holland could produce, the best that England could produce; yes, with the best that our cousins to the south of us could produce, Canada won 12 firsts, including two championships, 9 seconds, 7 thirds and 8 fourths. In fact, the Canadian exhibitors carried away more than half the prizes in twenty-three classes in which they exhibited."

At the Chicago International Exhibition, where the pick of American live stock meet, it is a common occurrence for Canadian breeders to win championships for Clydesdale stallions, as was done in 1912, when a grand championship was awarded, besides other leading prizes, and many of the principal awards for pure-bred and fat cattle, as well as sheep and swine, are brought back to Ontario. An exhibitor from the Province, who has frequently carried off championships in previous International Shows, won the championship for Shorthorn grades in 1912. The exhibit of sheep from the Province at Chicago is always an excellent one, and in some of the breeds the Canadian exhibitors are invincible. The grand championship for wethers in 1912 fell to an exhibitor of Shropshires from Ontario.



Dorsets.



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Horses.

The value of horses in the Dominion is greater than that of all other farm live stock combined. If prices count for anything, the horse is king to-day. Notwithstanding steam, electricity, the motor, and other forms of mechanical traction, horses are more difficult to procure and higher priced than ever.

Ontario is the banner province for the breeding of horses. On its resources every other province is depending for its supply. Thousands of its horses are passing through Winnipeg to the West. Despite high prices, numbers are being shipped from the Province in every direction every week.

Classes.—Four classes of horses are always in chief demand—the heavy-draught; the agricultural; the general purpose, express or delivery pattern for city use; and the carriage or combination horse.

The heavy-draught of the best quality, and weighing from 1,600 pounds upward, is selling for from \$325 to \$350 per head. For this class there is always a special demand in heavy transport work. Young heavy-draughts, 1,550 to 1,600 pounds, if the mare is registered, \$350 to \$500; if the mare is unregistered, \$300 to \$350; geldings, \$275 to \$375. Whether bred from imported or province-bred stock, this class has a splendid market, and will have it for many years.

The agricultural horse, the nice-turned, short-coupled, thick animal, with good flat bone, well-set head and tail, ample quality, and weighing from 1,300 to 1,500 pounds, brings on the market from \$225 to \$275. It is in greatest demand.

The general purpose horse, clean-boned, well-mouthed, and broken to single and double harness, with plenty of snap, standing from 15.3 to 16.2 hands, and weighing from 1,175 to 1,350 pounds, brings from \$250 to \$300, and is in constant demand.

The carriage or combination horse has no set price—the individual himself decides values, and these may differ all the way from \$200 to \$500. Since the coming of the motor car, breeders apparently thought this class of horse would be little used, but there is still a good demand and it is likely to continue.

For any type of horse there is a good market in Ontario, but the trouble is to get the quality. An authority says: "What we want now in Ontario is better horses of all qualities, heavier horses, and more of them, and at a cheaper price, and let us keep Ontario to the fore as the banner province."



Ideal Type of Saddle Horse

Breeding.—Breeding along special-purpose lines is the way to reap success. There is not to-day a prepotent, general-purpose breed of horses. Certain stallions, some of them pure-bred, more of them grades or scrubs, may in weight and other particulars fill the general-purpose bill, but experience has taught that when these are used as sires they fail to get anything like a large per cent. of commercial stock. Again, the best females should be retained. Canadian farmers have parted with their good brood mares almost as readily as with their geldings. There can be no improvement in quality unless farmers refuse to sell their high-class mares.

Profit.—"And does this horse-raising business pay?" is the question put and answered by Principal M. Cumming, College of Agriculture, Truro. "Yes, if you raise the kind of horse the market wants. We estimate that it costs us from \$100 to \$125, counting in risk and everything, to raise a draught colt up to two years of age. After that time he can be broken to harness and will pay for himself until he reaches the market age. A few years ago this market was five, six, or even seven years, but at present horses are so scarce that four-year-olds and even three-year-olds, if up to size, will sell at from \$400 to \$500 per pair, and, if of extra quality, considerably higher. This is certainly a splendid return, and shows that horse-raising can, even under ordinary conditions, be made just as profitable as any other line of farm business. The real horseman, who understands the business and likes horses, can make, under present conditions, more money in horse-raising than in, perhaps, any other line of farming. The average farmer, if he applies business principles to this industry, can add some hundreds of dollars every year to the income from his farm."

Cattle.

Dairy Cattle.—The animals of this class are the Holstein, Ayrshire, and Jersey. Larger and stronger than the corresponding grades, they have a far greater capacity for their special service, yielding almost a third more milk. A cow in Eastern Ontario produces 24,000 pounds of milk a year. To acquire a pure-bred herd is more expensive than a grade, but when properly cared for the herd gives in milk and calves a far larger profit, and it is not more costly to maintain. In this line many farmers have been signally successful. Well handled, there is no animal that pays better than the pure-bred dairy cow. The Shorthorn is also in the class of dairy cattle. Each breed has its champions, and experience must decide.



Holstein Cow

Dual-purpose Cattle.—While, on the whole, some of the dairy breeds excel in the production of milk and butter, the milk strain of the Shorthorn seems to suit best the requirements of those that handle the dual-purpose cow. It is exceptionally valuable for crossing purposes, and though generally viewed as a beef breed, it has produced many fine dairy animals. A dual-purpose cow, capable of bringing forth a calf that can be economically developed into a beef animal of good quality, and of yielding at least 5,000 pounds of milk per year, while realizing a good profit as meat when past breeding, meets with favor in many parts of the Province. It is a significant thing that Shorthorns and their grades make up seven-tenths of the stock used for dairy purposes in the Old Land.

Beef Cattle.—In this Province there have been four breeds handled for the purpose of beef production: the Shorthorn, the Hereford, the Polled Angus, and the Galloway. In most of the beefing sections the foundation stock of breeding cows until recently has been almost wholly Shorthorns and their grades. When properly bred and handled, the Shorthorn is a profitable dual-purpose breed. But perfection of beef type cannot be so closely approached on the average by the dual-purpose as by the special, nor can there be so high an average of milk production as by the special purpose dairy breeds. Nevertheless there is abundance of evidence showing a profitable combination of these qualities, which suits to perfection the requirements of thousands of farmers in the economical production of even high-class beef on high-priced lands. The good feeding qualities and rapid growth of the Shorthorn make it a general favourite among farmers that raise steers for beef. Nevertheless the other breeds have their strong advocates.

Demand.—There is a good demand for all classes of stock. In order to revive an industry that had declined and replenish a stock that had been depleted, the Northwest Provinces have recently imported from this Province hundreds of grade dairy cattle for the production of milk and beef. The prairie ranchers have received since August, 1912 (a matter of five months) over 1,000 head of breeding cattle from Ontario. The demand for well-bred cattle has merely begun, and Ontario grades are preferred. Whether Shorthorn, Holstein, or Ayrshire, the most in demand are the dual-purpose grades. Many cattlemen are devoting attention to the dairy Shorthorn, believing it to be the most suitable at once for Ontario and the Northwest. In the latter and in Northern Ontario beef production is coming, but Old Ontario will be the main meat supply for the present and for some years to come. The United States is



Champion Bulls and Steer, Guelph Winter Fair



Grand Champion Short Horn Bull, Canadian National Exhibition.

also drawing upon the Province, and the profit to the seller is considerable. Up to November 22 of 1912, as many as 3,191 head of high-class beef cattle passed through Black Rock alone to American markets, in the face of a duty of about \$27.50 per head.

Price.—There is a general scarcity of breeding cattle in the United States, in the Atlantic Provinces, and in Ontario itself, and this shortage is involving high prices for good beef and attractive values for the commoner grades. The average top price paid for good to choice butcher's cattle at Toronto during 1912 was \$7.03, as against \$6.16 during 1911. But parting with too many breeding cattle is a danger. Further, tempted by present gain, the farmers of the Province are disposing of their calves. This also is a menace. For every 100 pounds of veal gained 1,200 pounds of beef are lost to the consumer. And marketable cattle cannot be reproduced and grown in a day. The injury can only be averted by retaining a sufficient number of mothers and by the raising of suitable heifers as breeders to produce the meat demanded. And it is essential that farmers should bear this in mind when, allured by present high prices, they are giving more attention to live stock. But numbers without judicious breeding to quality will tend to lower prices and poorer business, whereas a healthy increase coupled with quality will signify high prices, larger markets and a greater demand. The Christmas markets are instructive in regard to the value of quality even in the face of heavy receipts. Better feeding cattle make cheaper production and lessen the range of price between seller and buyer. By sufficiently reducing cost of production the farmer will be able to sell cheaper and at greater profit.

Sheep.

For the successful raising of sheep the climate of Ontario is as nearly ideal as any other land. Perhaps in no country are sheep liable to so few diseases, and all the leading breeds do well. Ontario is the breeding-ground for other provinces of the Dominion, and it helps to supply the United States flockmasters who look for quality and stamina when fresh blood is required for the improvement of their stock. Nevertheless the sheep industry has decreased. But recent legislation and effort is such that a revival in breeding operations is expected, and sheep farming and wool growing may very soon be one of the largest and most popular branches of agriculture in Canada. With a climate adapted to their healthy and economical development, abundance of cheap pasturage and a stable

and profitable market, sheep are bound to be bred in increased numbers. When good grade flocks are established all over the Province with the use of pure-bred sires in greater numbers, the pure-bred business will be built and remain on a steady basis. A large and often lucrative export trade in pure-bred sheep has been carried on with the United States, but it is unstable. The home trade in sheep has been very satisfactory. There is a steady and growing demand in most of the provinces, especially Quebec and those by the sea, but it is only a question of a short time when the Great Northwest will be the most profitable market.



Shropshire

Swine.

The hog industry is one of the most profitable branches of agriculture. It is associated chiefly with dairying, the by-products—buttermilk, skimmilk and whey—being used as food, and producing the finest quality of bacon. Probably no animal but the hog will extract from these unmarketable materials such high financial returns. It is very important that the ration should be carefully graded according to the age of the pig and the object aimed at.

Regarding cost, to feed meal alone is expensive, and raw turnip is usually so, but meal along with skimmed milk and cooked turnips or other succulent food materially lessens the expense. The man that grows his own feed has two sources of profit, the grower's and the feeder's, and thus has a distinct advantage over the purchaser of supplies. And if he will give his pigs an abundance of fresh air and sunlight, with shelter from winds or air currents, and a well-littered dry bed, his success is certain. The average farmer should not attempt breeding pure-breds to meet the demand for breeding stock, but should confine himself to producing market hogs. He will also find it safer to handle a small number of hogs, and rather as an adjunct to more important operations. The man



Berkshires.

that knows what number of hogs his farm will sustain in average conditions, and is never either overstocked or understocked, but preserves a judicious conservatism in the face of fluctuating prices, is the man that makes money out of hogs. A fair profit on feeding hogs is from 20 to 40 per cent., and the Dominion Experimental Farm usually makes the latter out of the hogs fed on the best rations.

There are pork-packing and bacon-curing establishments in various towns and cities of Ontario, and a steady market for light young hogs is assured throughout the year. The yearly output from five Toronto plants alone is estimated at \$10,004,419.

The success of Canadian bacon and hams in the British market is largely owing to possessing quality superior to the corn-fed hogs of the United States. Canadians cannot compete with the Ameri-



Ontario Poultry, Swine, and Prize Sheep.

can feeders in the production of the thick, fat hog, which makes a cheap, inferior class of bacon. But they can in the production of prime, lean bacon, nicely marbled and mild cured, in the form of the Wiltshire side. And a high-class article of this kind is what is in demand in Canada and also for the export trade.

Poultry.

Poultry-raising is developing greatly, and is capable of much larger expansion. The flocks of Canadian farmers average only 35 head of poultry per farm. With 50 acres of land or less the farmers could keep at least 50 hens, and with more they could easily keep 100. When this aggregate is reached there would be from two to three times more poultry in Canada, and from two to three times the number of eggs. The ordinary Ontario farm can keep a flock of 200, and in good condition. Eggs and dressed poultry are in strong demand at profitable prices. No industry is more important.

The Poultry Department of the Agricultural College has had great results in egg production, due to care in housing, feeding and breeding. The average laying of 53 Barred Rock pullets for the year was 174 eggs each, 13 of which exceeded 200, 6 averaged 250, and 1 had as many as 282. The average hen in the Province lays about 60 eggs a year, and yields a dollar of profit. But it is evident that with care the farmer could increase his profit greatly. The industry is a scientific business, like any other form of agriculture. And, again, the farm—not the town or city—is the ideal place for poultry, with the open run in farmyard and field during the summer months.

Co-operative egg-circles have started on a small scale in Ontario, and results have been encouraging. Farmers have realized from two to six cents more per dozen for their eggs. They are now giving their poultry more attention. Plans are being made to improve their quarters, to secure a better-laying strain, and to increase the size of the flock. The co-operative system of handling and marketing eggs and poultry is generally adopted in Denmark, Sweden, Ireland, and South Australia, and the industry in these countries has made tremendous advancement.

Local Poultry Associations are encouraged throughout the Province by Government grants, and 44 Associations receive them. The Department also sends a lecturer to give practical instruction at their shows. At the Twentieth Annual Exhibition of the Toronto Poultry and Pet Stock Association, November, 1912, there was an aggregate of over 1,300 thoroughbred birds, showing higher quality

than the previous year, and a substantial increase. And at the Provincial Winter Fair, Guelph, December, 1912, where the poultry exhibit is the greatest in America, the entries exceeded 5,000. Ontario breeders win many prizes at the leading American shows.

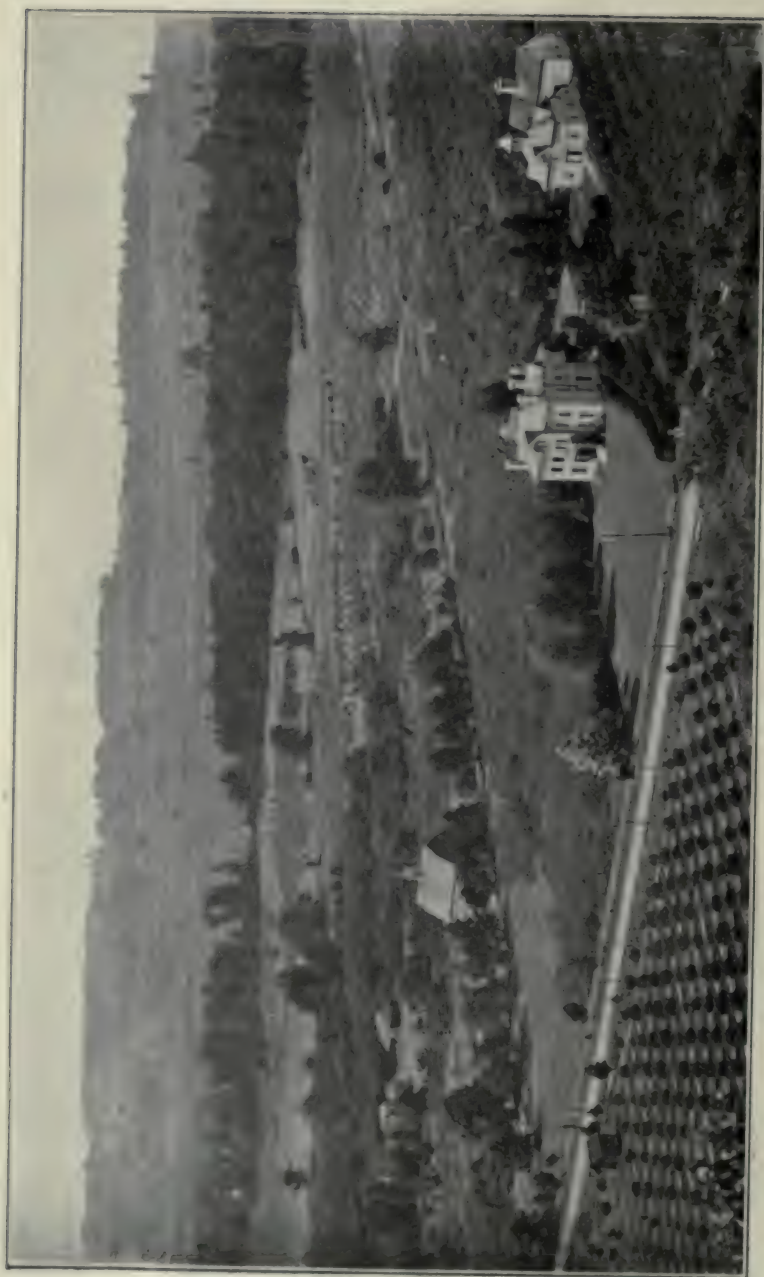
Beekkeeping.

The Province of Ontario is well fitted for the keeping of bees, and the industry pays well. For white honey a better price has been secured than ever before. The industry is capable of enormous expansion in both production and consumption. Provinces where honey cannot ordinarily be produced can take from five to twenty-five times Ontario's present supply. The farmer that will invest in from ten to fifty colonies of bees will make a fine profit. The average production of light honey per colony is 58 pounds per year. There are 300,000 colonies in the Province. Under the direction of the Lecturer in Apiculture, there is now a great increase of work in the College and in various parts of the Province.

At the Ontario Horticultural Exhibition, held in Toronto in November, 1912, Mr. S. D. House, a beekeeper from Syracuse, said: "I was at the Madison Square Gardens last winter, and there were exhibits from six States in the honey collection, but the whole together would not touch the Ontario exhibits. I have travelled all over the United States, but I have never seen such an exhibit as you have here."



The Apiary



Some Grimsby Fruit Farms.

FRUIT GROWING.

The fruit belt of Southern or Old Ontario extends from east to west for a distance of over 400 miles, and from north to south for from 50 to 150 miles, constituting an area of from 20,000 to 60,000 square miles. It is no small oasis in the desert, but a garden in process of realization on the grandest scale. The yield at present is limited only by the want of adequate labour, and its prolific possibilities are as yet unmeasured. In the open air grapes and peaches grow luxuriantly in vineyards and orchards extending over miles. And in the fall a market may be seen where hundreds of wagons are laden with luscious fruit and the atmosphere is filled with fragrance. In the fruit districts there are many beautiful homes, from the sweet cottage with shade trees and pretty garden, to the handsome brick house with ornamental trees, tennis lawn and picturesque beds of flowers. An authority on fruit-growing says: "We have the land, the sunshine, and the rain—we have everything; only we need more men—more enthusiastic fruit-growers—to take advantage of these favourable conditions to make Ontario grow, so that she will continue to be the guiding star of this great Dominion."

Kinds.—Ontario is the country of the king of fruits, the apple—Northern Spy, Snow, King, Golden Russet, Greening, Wealthy, and many other varieties; and it produces in abundance the pear—Bartlett, Anjou, Duchess, and others; the plum, such as the Burbank, Bradshaw, Lombard, and Monarch; the quince, the cherry, the strawberry, the raspberry, and other small fruits; the grape, choice varieties of which are the Concord, Worden, and Niagara; and the peach, its best varieties being the Yellow St. John, Crawford, Elberta, and New Prolific.

Quality.—The gardens and orchards of Canada have the reputation of being among the best in the world, its apples, peaches and melons ranking with the finest on tables of luxury in London, New York and other great centres of wealth. Ontario leads in fruit-production, and it has fruits of the finest quality.

In the southern parts of the Province the peach is produced in perfection. Samples of Niagara peaches exhibited at the Crystal Palace, London, were admitted to be the finest that ever entered any British port.

At the Exhibition of the International Apple-shippers' Association, held at Cleveland, United States, August, 1913, the President's Cup was awarded to Ontario, which gives this Province the premier position for apples on the North American Continent.

Acreage and Yield.—The Province has *271,066 acres of orchard, *13,940 acres of small fruits, *9,069 acres of vineyard, and 56,716 acres of garden; producing 98 per cent. of the grapes, 92 per cent. of the peaches, 84 per cent. of the pears, 69 per cent. of the plums, and 60 per cent. of the apples and cherries grown in Canada. The average annual yield of apples in the Province is about 12,000,000 bushels, and of grapes about 20,000 tons. The production of peaches is mostly confined to Ontario.

Values.—The following table of average values for a year indicates two points of view: (1) f.o.b. value to the farmer, (2) gross value to the retailer:

Apples	\$12,500,000	\$20,000,000
Peaches	600,000	1,500,000
Grapes	600,000	1,000,000
Pears	500,000	750,000
Plums	300,000	450,000
Cherries	300,000	400,000
Small fruits	1,500,000	2,000,000
	<u>\$16,300,000</u>	<u>\$26,100,000</u>

Prosperous Parts.—In Ontario every branch of fruit growing is prospering to a degree never known before. The south-east, or Niagara peninsula still holds the banner in the growing of tender fruit, such as peaches, grapes, and cherries, with enormous production and great success. Essex County, south-west, grows peaches to perfection, and small fortunes are made annually. But it is a mistaken view that Niagara and Essex are the only districts that grow peaches commercially with profit. Norfolk County and other parts in the south are gaining wide distinction. This county has a large acreage, and all along the shores of Lake Erie some excellent orchards are to be found. Lambton County, on the south shore of Lake Huron, is laying a foundation not excelled by any other part of the Province; it has at least 250,000 trees of various ages in commercial orchards, and is fast coming to the front. And sections as yet little known will soon be in close competition with the old-established districts, particularly in the markets of western Ontario. There is still much to be learned before the growers as a whole can hope to equal the best of the Province, nevertheless there is progress, and the peach industry of Ontario has a great future. In the Georgian Bay district there is a great revival in the care and scientific treatment of apple orchards, and the output is increasing fast. The eastern counties, flanking Lake Ontario, are making remarkable progress. And so also are certain parts alongside the

* Dominion Census Returns

St. Lawrence. Other fruit sections are the Ottawa Valley, from L'Orignal in Prescott to Pembroke in Renfrew; the south shore of Lake Simcoe; Bruce and Huron Counties on Lake Huron; and the inland counties of Middlesex, Oxford, and Brant, with the southern parts of Perth and Waterloo and parts of Wellington and Dufferin, that central portion being an extension of the apple belt that lines the north shore of Lake Ontario.

An Awakening Interest.—In many sections of the Province, farmers are taking an intelligent interest in their orchards, expending time and labour, and reaping handsome returns. These examples and Government demonstrations, scientifically based, are stimulating others, and a great awakening is at hand. The half-hearted, haphazard methods of many farmers have got to go. Indeed, the awakening has begun. Much attention is paid to cultivating, fertilizing, pruning and spraying. Fully 100 per cent. more spraying is done than in any former year. Redeemed from neglect, the orchard has doubled or quadrupled in value, and is often now considered to be the best asset of the farm. The making of orchards, apple and peach, is advancing at a very rapid rate, hundreds of thousands of trees having been planted during the last few years. Fruit-growing is no longer confined to the farmer. Attracted by handsome profits, capitalists are taking up this branch with enthusiasm. In a few years Ontario will be producing twice as much fruit as before.

Results.—Apple orchards, well kept and properly marketed, bring to the farmer from \$60 to \$150 net profit per acre. The average yield is from two to three barrels a tree, or 75 to 100 barrels per acre, and the average return to the farmer at shipping point is from \$2.00 to \$3.00 per barrel. With careful treatment, apple trees can be made to produce in five years' time and be highly productive within fifteen years. A grower has even averaged a barrel per tree from four-year-old early varieties. But this is very exceptional. His Northern Spy trees, 38 in number, totalled 300 barrels of No. 1 grade, with 15 per cent. culls besides. But the Spy has gone as high as nine barrels, grade No. 1, and there are apple-trees that go much higher still. The Hon. Mr. Burrell, Dominion Minister of Agriculture, says: "There are few men who realize that they ought to have a record of the performance of their orchards, and the general farmer who is carrying on fruit growing is making a big mistake if he does not get some systematic knowledge of what his orchard is doing and what it ought to do. If he did, he would be simply amazed at the financial results he could get from his orchard."



Packing Apples in Peel County.



Hot-house Grapes grown in the open air, Niagara-on-the-Lake.

Peach trees, 100 to the acre, produce fruit when four years old, and yield profitably till about the fifteenth year. By specializing it is possible to make a net profit of \$250 per acre, for results prove that more than this has been done. The average profit to the farmer at shipping point is \$150 per acre. There is a splendid market for large peaches of the white-fleshed variety in the Old Country, where a good average price may be expected.

Pear trees bring the grower a net profit of from \$65 to \$100 per acre.

Plum trees realize him from \$40 to \$75 per acre net.

Grape vines begin bearing in the fourth year, and continue fruitful for a lifetime. The average product is three tons per acre, and the profit to the producer is from \$30 to \$60 net.

The smaller fruits—cherries, strawberries, raspberries, blackberries, gooseberries, and currants—yield the farmer handsome net profits, from about \$60 or \$100 up to \$500 per acre in some cases.

An orchard of 400 trees has paid in a few years for the rest of the farm of 160 acres. A thirty-five acre orchard had a gross return of over \$10,000 one year from exported and evaporated fruit. A forty-acre orchard latterly changed hands, increasing to \$10,000, and then to \$17,000.

Men have worked up from being labourers on a fruit farm or a mixed farm to various stages of prosperity. One bought ten acres of bare land and earns a living of \$800 to \$850 a year on small fruits. Another has ten acres of market garden, which has risen in his hands to a value of \$15,000 or \$20,000, free of encumbrance. Another has a 12-acre garden, a good house with all city conveniences, and with net profits on fruit of \$1,000 in a year. One labourer bought 15 acres by his earnings, clears off a mortgage of \$600 in three years, and secures a small home. Another has a fine 15-acre farm of small fruits and a beautiful house. Another labourer has twenty-one acres of peach and other fruit trees, with two fine houses, free of debt, and has sold in a year \$2,750 worth of fruit. And another has 43 acres of fruit and vegetables, yielding a net year's profit of \$2,700 to \$3,500.

The following began direct on their own purchased holdings: A man from London, England, arrived in this country six years ago and purchased 25 acres of fruit land, Niagara district, paying \$150 per acre. He planted his entire farm in fruit trees and berries, and after 4½ years sold his farm to a Canadian fruit-grower for \$750 per acre, and has since bought another farm of 100 acres in the neighbourhood.

A commercial traveller for a large wholesale house in Toronto, after being several years in their employ, saw that there was no prospect of promotion. He was advised by some friends, who were fruit-growers, to purchase a fruit farm of 14 acres. He had no funds with which to start; his friends lent him \$1,000 to buy stock and implements and to make a small payment on the farm. He was forty years of age when he started; he had a wife and five children. The farm was half planted in fruit and in full bearing the first year. He sold \$1,800 worth of produce at a cost for labour of \$350. The farm is now entirely planted with fruit; he has built a new house costing \$3,000, and several outbuildings. The children have all received a good education, and he is living in comfort. When asked by a friend if he would go back to city life, he answered that a span of horses could not pull him back.

A bank clerk, on account of ill-health, was advised to take up fruit-farming. He purchased 25 acres, and being an unmarried man, induced his sister to keep house for him. He paid \$325 per acre, paying \$1,000 down, and spent \$2,000 on the house, buying stock and implements. The farm was half planted in peaches and grapes in full bearing. He has in two years planted the balance of his farm in fruit. He met all payments promptly, and has refused an offer of \$600 per acre for his farm. He is now as healthy a specimen of vigorous manhood as you would wish to meet, and could not be induced to return to city life.

Through the illness of his wife, a man was forced to leave the city for the country. He had no knowledge of farm life. He bought thirty acres of fruit land convenient to a shipping point at \$130 per acre. Then he secured the services of a practical fruit-grower and his wife, and proceeded to plant out his entire farm in various kinds of fruit—peaches, pears, plums, cherries, grapes, strawberries, raspberries, gooseberries and currants. While these were growing he met current expenses and built a modern bungalow by raising tomatoes, beans, corn and other vegetables, which he sold to the canning factory. In three and a half years he sold his farm for five hundred dollars per acre.

A carpenter by trade, with no knowledge of fruit growing or market gardening, bought three acres of unimproved land with house, paying \$250 per acre. The first year he cleared \$300, the second \$700, and the third \$800. Then he built a greenhouse costing \$200, and the fourth year, after paying all expenses, he had to his credit \$1,700. This is only one of many instances that could be cited of mechanics doing well on small holdings in the Niagara district.



Fruit and Vegetable Market, Hamilton.



Special Fruit Train carrying Strawberries to Toronto and Montreal Markets.

Not twenty years ago, two young men of ordinary occupations, and practically ignorant of farming, bought $7\frac{1}{2}$ acres of land at a small price in the Georgian Bay district. They added to it from time to time till it has extended to 200 acres. At first largely swamp, it is now in a high state of productivity. It is one of the largest fruit, vegetable and flower gardens in Ontario, and is valued at \$50,000. The owners employ as many as 125 hands in the summer. They never peddle their products, but do all their business by phone or correspondence, and they cannot supply the demand from far and near in the towns and lumber shanties of the north. Their profits are substantial.

Transportation.—Compared with the Western Provinces, transportation facilities are excellent. The Niagara Peninsula and other southern districts are particularly good, there being electric lines which, supplementing the steam railroads and crossing the country at numerous points, carry the fruit rapidly to the railway station or wharf for prompt dispatch to the larger markets, while cold storage cars proceed to the Northwest.

Export.—Ontario has a great outlet for apples, peaches and pears in the markets of the British Isles, and a rapidly increasing demand for all her fruits in Northern Ontario and the Northwest Provinces. The latter parts, though excellent in grains, are too low in temperature to grow successfully such fruits as peaches, grapes, apples, pears, plums and cherries, and must therefore look beyond for their supply. Thus Ontario, even now unable to provide for the demand, has untold opportunities north and west.

Although most of the apple crop (as also all other fruits) is sold and used in the Province, there is much that goes elsewhere. About 750,000 barrels per year are exported *via* Montreal, St. John, Portland and Boston to the British Isles, and 250,000 barrels are sent to the Northwest or Prairie Provinces, representing a gross return of about \$3,000,000. More apples have been shipped to Great Britain during the last ten years than by any other province or state on the continent.

Over 8,000 cases of peaches were exported to the Old Country in 1912, realizing from 70 cents to \$1.40 per case, wholesale, according to condition.

Hundreds of cars of tender fruits are railed annually to the Prairie Provinces.

Canning Factories.—Over 70 factories, located at suitable transportation centres, are engaged in putting up fruits and vegetables in tin and glass. Great quantities of fruit are thus prepared, espe-

cially in the orchard sections, for sale throughout the Dominion, and for export to Great Britain and other parts of the world. It is no unusual thing for the fruit-grower to sell his entire crop before it is ready to handle. In these factories the producer has an investment yielding from 10 to 20 per cent., and making an aggregate return of about \$1,000,000.

Co-operative Societies.—These associations, numbering over fifty, educate the fruit-growers in the care of their gardens and orchards and in the handling of their products. The sellers are thus in a position to guarantee the buyers that there is uniformity in the size and quality of their offerings. And they are thereby enabled to sell their products and to get high prices, whereas independent growers are sometimes placed at a decided disadvantage. These co-operative associations have been of great benefit to the trade throughout the Province. Lambton County is an illustration. The total estimated yield of apples in that county in 1912 was 50,000 barrels, of which 35,000 were sold and 15,000 wasted. One co-operating group of farmers had not sold a barrel for less than \$2, while four other associations realized an average price of \$2.25 per barrel. On the other hand, independent growers had not secured more than 50c to \$1 per barrel. Moreover, the 15,000 barrels were all lost by men who did not belong to an association.

Government Fruit Branch.—The Government of Ontario materially guides and aids the fruit-growers in a variety of ways, such as by experimental fruit stations or farms, inspection of nurseries and orchards, demonstration orchard work in forty different parts of the Province, sending out demonstration fruit trains among the farmers, demonstration box packing of fruit, and by instruction and exhibition work in the securing of markets in the Northwest Provinces and the British Isles. Besides a large share in the above work, the Director of the Fruit Branch acts as secretary of the Co-operative Fruit-Growers of Ontario, which is the central body of over forty co-operative shipping associations in the Province, and he also looks after the interests of the Ontario Fruit Growers' Association, whose membership numbers sixteen hundred farmers.

Price of Land.—The best apple lands, light or heavy, and ready for planting, can be bought throughout the Province for from \$40 to \$100 per acre.

Excellent peach and cherry lands in the Niagara district are from \$150 to \$300 per acre. But specially favored locations run as high as from \$1,000 to \$1,200. Best grape lands in the same district, from \$50 to \$200 per acre. But here again special locations

are much higher. Good land for pears and plums in the Niagara district average about the same as grape lands. The lighter types of soils in that district, which are used for peaches and pears, are also used largely for the growing of raspberries and strawberries. The heavier soils produce the other small fruits, along with the grape, pear and plum, and prices rule accordingly.

In the newer districts along Lake Erie, light or peach soils may be purchased at prices ranging from \$50 to \$150 per acre, and heavy soils for the other fruits at from \$40 to \$100 per acre.

Generally throughout the Province, other than the tender-fruit districts, the lighter soils are used for the strawberry, raspberry, blackberry and sour cherry, while the heavier soils are given to the



Figs grown and ripened in the open air, Niagara-on-the-Lake.

other fruits, including the pear and plum, and, subject to distance from shipping point, may be bought at from \$30 to \$150 per acre.

Opportunities for investment.—The capital already invested in the field of fruit is \$75,000,000. And the opportunity for further investment is great. Other conditions equal, the outlet for profitable venture is meantime hard to limit. Although three-quarters of all the fruit of Canada is grown in Ontario, this industry of the Province is still in comparative infancy. The fruit area is of vast extent, including immense unplanted stretches suitable for apples, fine in quality and of great variety, and withal the fruit in most demand. The soil is rich, varied and well watered. The climate is good, in certain parts ideal. Cultured and prosperous, with the conveniences and amenities of modern civilization, the Province occupies a central and commanding position in the matter of splendid markets. Provincial Government information and institutions,

fruit-growing associations and co-operative organizations all tend to guide and safeguard the interests of the investor from the first throughout. Honest effort meets with success. And labour-saving machinery modifies or removes the drudgery of a life at once helpful and independent.

VEGETABLE GROWING.

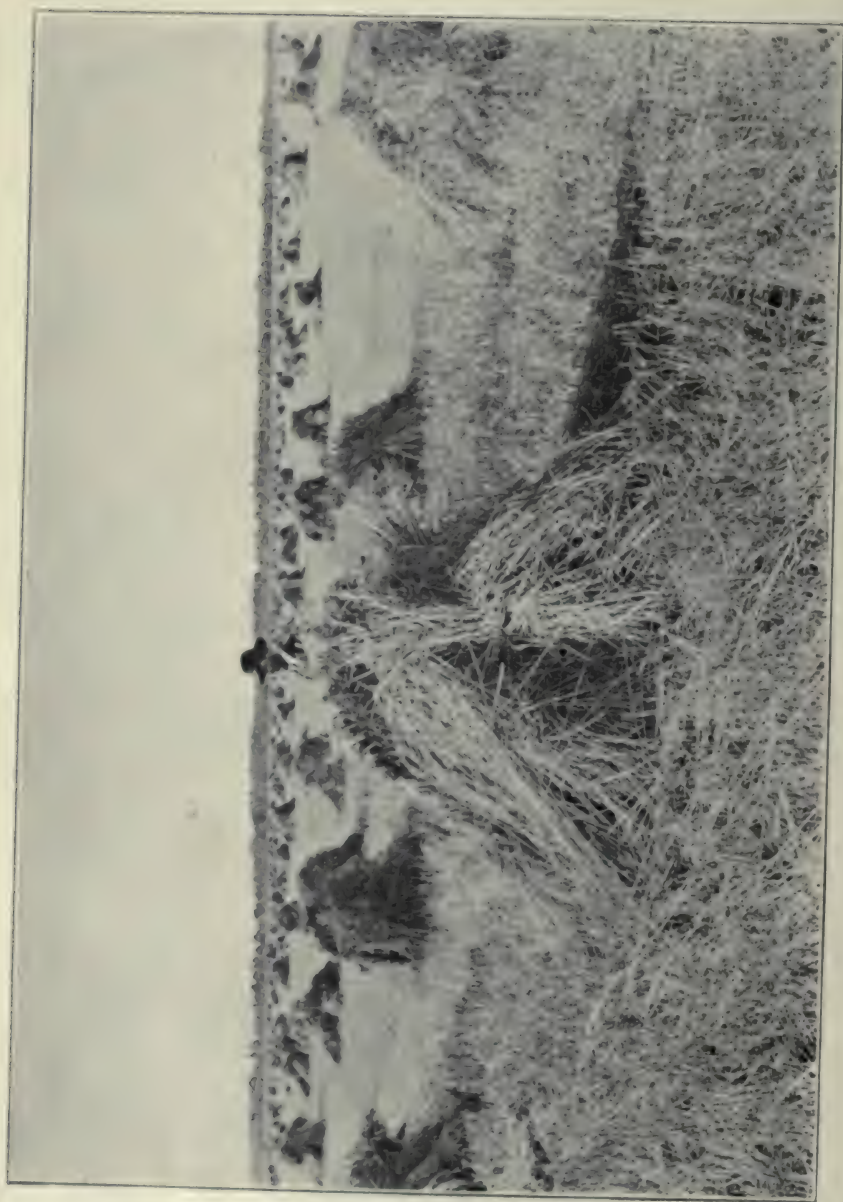
Ontario is well suited for the production of every variety of garden vegetables, such as cabbage, celery, cucumbers, onions, tomatoes, carrots, beets, cauliflower, asparagus, radishes, lettuce, peas and rhubarb. The following are *average* crops per acre: cabbages, 10 tons; cucumbers (small), 5 tons; tomatoes, 250 bushels; potatoes, 200 bushels; onions, 300 bushels. Onions have yielded as high as 1,200 bushels.

Owing to the rapid expansion of our cities, large tracts of market gardens have been taken up and utilized for city lots, and at the present time our vegetable growers are unable to supply the demand of the rapidly increasing population.

Excellent market garden land can be procured at reasonable rates, and those who are engaged in the business find a ready market at profitable prices. There is a splendid opening in Ontario for thousands of men who understand the business of raising vegetables. The great difficulty is the lack of efficient men to raise the produce required.

TOBACCO.

The rich soil and warm climate of the southern border counties appear favourable to the production of excellent grades of tobacco. Essex and Kent are the two main counties engaged in this industry. In 1911 about 15,000 acres were under cultivation, with a yield of 20,000,000 pounds and a value of 2,000,000 dollars. In 1912 the acreage was 10,749. Many kinds of tobacco are grown, but the White Burley predominates. The complete cost of cultivation is practically \$50 per acre, the average crop is 1,250 pounds per acre, and the average price is 16c. per pound, which varies with the year and goes as high as 17c. The industry is one of the most profitable in south-western Ontario.



Harvesting Wheat.

AGRICULTURAL STATISTICS.*

Rural Area Assessed.

Year.	Acres of assessed land.	Acres cleared.	Acres of woodland.	Acres of slack land.	Acres of swamp, marsh or waste land.	Per cent. cleared.
1912.....	24,083,747	14,561,400	5,555,500	5,567,725	1,409,122	60.34
1911.....	24,790,400	14,920,519	5,400,000	5,400,000	1,469,881	60.27
1910.....	24,678,880	14,807,145	5,351,730	5,356,800	1,515,205	60.30
1909.....	24,497,400	14,592,961	5,300,844	5,304,900	1,500,840	60.03
1907.....	24,505,110	14,116,474	5,473,570	5,080,100	1,775,064	57.57

Farm Produce—Area, yield and market value.

Year.	Fall Wheat.				Spring Wheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912.....	710,888.	15,020,885	21.1	15,790,908	122,000	2,802,078	23.0	2,075,000
1911.....	837,192	17,920,500	21.4	18,419,411	122,714	2,865,200	23.4	2,090,100
1910.....	748,410	16,803,172	22.5	17,175,078	120,000	2,600,000	21.7	2,000,000
1909.....	660,275	15,967,055	24.2	16,520,000	120,000	2,600,000	21.7	2,000,000
1908.....	679,842	16,400,470	24.1	16,649,000	119,100	2,597,000	21.9	1,990,000
1907.....	676,164	15,545,001	22.8	16,410,000	111,114	2,435,000	21.7	1,837,000
Average (5 years) 1907-1911.....	709,920	17,141,070	24.1	18,017,524	120,000	2,590,000	21.6	1,990,000
Average (10 years) 1892-1911.....	851,204	17,870,805	21.0	18,547,800	207,117	2,602,540	12.6	1,700,540

Year.	Barley.				Oats.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912.....	647,000	18,205,070	28.1	11,000,000	2,000,000	30,000,000	15.0	10,000,000
1911.....	618,977	18,340,120	29.6	11,000,000	2,000,000	30,000,000	15.0	10,000,000
1910.....	600,144	18,400,100	30.6	11,000,000	2,000,000	30,000,000	15.0	10,000,000
1909.....	600,202	18,770,771	31.3	11,000,000	2,000,000	30,000,000	15.0	10,000,000
1908.....	704,000	20,000,000	28.4	11,000,000	2,000,000	30,000,000	15.0	10,000,000
1907.....	700,000	21,700,000	31.0	11,000,000	2,000,000	30,000,000	15.0	10,000,000
Average (5 years) 1907-1911.....	687,800	19,340,000	28.1	11,000,000	2,000,000	30,000,000	15.0	10,000,000
Average (10 years) 1892-1911.....	651,120	18,000,000	27.6	11,000,000	2,000,000	30,000,000	15.0	10,000,000

*From Report of Bureau of Industries for the Province of Ontario.

Year.	Peas.				Beans.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912.....	334,334	3,667,005	16.6	4,047,354	69,703	1,182,132	17.0	2,280,173
1911.....	304,491	4,469,182	14.7	4,380,883	51,508	898,312	17.4	1,711,089
1910.....	400,414	6,016,003	14.9	4,856,986	49,776	892,927	17.9	1,386,798
1909.....	381,000	7,613,650	20.0	6,437,685	45,029	826,344	18.4	1,354,325
1908.....	396,642	7,401,336	18.7	6,131,449	46,477	785,757	16.9	1,160,103
1907.....	340,977	7,365,036	21.6	5,744,728	47,502	790,269	16.6	1,201,209
Average (5 years)								
1907-1911.....	365,437	6,571,642	18.0	5,508,346	46,071	838,502	17.4	1,358,705
Average (20 years)								
1892-1911.....	609,295	11,795,901	19.3	7,154,059	42,620	733,330	17.2	875,494

Year.	Rye.				Buckwheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912.....	105,949	1,833,675	17.4	1,987,208	205,893	5,414,796	26.3	3,950,001
1911.....	98,652	1,563,971	15.8	1,336,510	189,039	3,652,331	20.4	2,524,992
1910.....	95,397	1,630,333	17.0	1,024,787	194,313	4,693,881	24.1	3,346,367
1909.....	94,691	1,573,921	16.6	1,060,366	176,630	4,280,790	24.2	3,384,440
1908.....	87,998	1,453,616	16.5	1,012,953	140,605	3,323,058	23.6	1,799,890
1907.....	67,158	1,039,021	15.5	721,081	113,039	2,546,468	22.5	1,461,673
Average (5 years)								
1907-1911.....	88,755	1,449,972	16.3	1,029,179	162,845	3,739,408	23.0	2,048,476
Average (20 years)								
1892-1911.....	115,082	1,883,143	16.4	1,025,899	110,468	2,245,319	20.3	1,013,029

Year.	*Corn for husking.				*Corn for silo.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Tons (green.)	Per acre.	Market value.
				\$				\$
1912.....	301,251	21,969,468	72.9	8,162,565	377,982	3,969,597	10.50	9,923,993
1911.....	308,370	21,913,290	71.1	9,693,994	335,935	3,764,227	11.21	9,410,568
1910.....	309,519	24,900,386	77.7	9,301,245	326,627	3,788,364	11.60	7,576,728
1909.....	332,789	22,612,690	70.1	9,705,826	288,346	3,371,652	11.70	6,749,310
1908.....	299,680	23,601,122	78.8	9,440,336	233,753	2,729,265	11.68	5,458,530
1907.....	338,573	21,899,466	64.7	6,219,448	209,354	2,029,547	10.13	4,059,094
Average (5 years)								
1907-1911.....	317,984	22,986,791	72.3	8,872,170	277,003	3,137,211	11.33	6,650,846
Average (20 years)								
1892-1911.....	399,796	22,103,406	71.3	7,047,693	196,970	2,254,734	11.45	4,603,574

* The combined average for corn for the thirty years, 1892-1911, is 403,137 acres, the average value of the produce for the same period being \$9,002,382.

Year.	Timothy.				Clover.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912	158,882	21,536,204	136	10,404,400	8,745	791,500	90	80,400
1911	168,437	22,518,808	134	11,750,200	8,405	761,000	90	755,800
1910	168,414	21,707,804	129	10,708,000	8,962	1,040,000	116	1,000,000
1909	169,800	21,438,300	126	9,992,000	8,500	1,071,000	126	1,000,000
1908	169,974	18,217,042	111	8,254,000	8,000	1,070,000	133	1,000,000
1907	177,180	20,507,070	115	11,000,000	8,200	1,040,000	126	1,000,000
Average (5 years)	168,854	19,645,420	117	10,431,000	8,775	1,114,000	126	1,000,000
Average (50 years)	157,604	18,100,000	115	7,800,000	8,842	2,070,000	244	200,000

*Estimated.

Year.	Mangel Wrecks.				Turnips.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912	69,100	27,671,114	400	2,773,000	191,500	48,500,000	252	4,800,000
1911	64,500	28,100,212	436	3,100,000	199,000	48,000,000	241	4,800,000
1910	68,900	31,000,127	450	3,774,000	198,000	44,000,000	222	4,800,000
1909	70,400	28,000,247	410	3,114,000	112,000	20,000,000	178	2,000,000
1908	67,800	29,070,000	429	3,000,000	100,000	21,000,000	210	2,000,000
1907	68,044	30,700,312	451	3,420,000	110,000	20,000,000	182	2,000,000
Average (5 years)	68,178	29,271,410	440	3,478,000	112,200	41,000,000	210	2,000,000
Average (50 years)	43,440	15,800,000	368	1,500,000	100,000	20,000,000	200	2,000,000

Year.	Sugar Beets.				Mixed Grains.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
1912	21,054	7,519,000	357	977,000	148,000	10,000,000	67	1,000,000
1911	21,004	8,241,000	392	1,117,000	148,000	10,000,000	67	1,000,000
1910	20,879	11,000,000	527	1,200,000	148,000	10,000,000	67	1,000,000
1909	19,012	7,000,000	368	900,000	148,000	10,000,000	67	1,000,000
1908	17,000	7,000,000	412	900,000	148,000	10,000,000	67	1,000,000
1907	15,801	8,000,000	506	900,000	148,000	10,000,000	67	1,000,000
Average (6 years)	21,100	8,400,000	400	1,000,000	148,000	10,000,000	67	1,000,000

Year.	Hay and Clover.				All Field Crops.		
	Acres.	Tons.	Per acre.	Market value.	Acres.	Value.	Per acre.
				\$		\$	\$ c.
1912.....	3,367,369	5,239,712	1.55	61,449,429	9,574,471	185,790,344	19 40
1911.....	3,391,469	4,238,362	1.28	55,707,071	9,718,741	179,974,358	18 52
1910.....	3,294,021	5,492,653	1.71	54,407,105	9,725,684	175,115,742	18 01
1909.....	3,228,445	3,885,145	1.20	49,754,078	9,578,322	167,906,577	17 54
1908.....	3,253,141	4,635,287	1.42	47,696,579	9,621,683	164,077,282	17 05
1907.....	3,299,552	3,891,863	1.18	58,896,050	9,750,615	176,354,759	18 09
Average (5 years):							
1907-1911.....	3,255,325	4,428,662	1.36	53,286,297	9,679,009	172,697,744	17 84
Average (20 years):							
1892-1911.....	2,627,856	3,825,411	1.46	36,088,722	8,415,427	126,386,720	15 02

Note.—Orchard, Small Fruits, Vineyard and Garden not included in All Field Crops.

Summer Fallow, Pasture, Fruit.

Year.	Summer fallow.	Pasture.	Orchard.	Small Fruits.	Vineyard.	Garden.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1912.....	278,317	3,082,671	310,096	24,699	11,634	56,716
1911.....	279,230	3,116,768	303,188	25,360	11,586	58,748
1910.....	254,028	3,159,712	298,347	24,384	11,390	57,982
1909.....	231,797	3,180,780	300,364	24,614	11,420	57,123
1908.....		3,326,169	326,550		11,705	
1907.....		*	*326,290			

* Statistics for pasture not taken in 1907.

† Including Vineyards and Small Fruits.

Other Crops.

The acreages devoted to other crops were as follows: Rape, 44,820 (more than one-half of which is grown in Grey, Dufferin and Wellington); flax, 9,125 (more than one-half of which is grown in the five counties, Lambton, Huron, Bruce, Grey, Wellington); hops, 692; tobacco, 10,749 (Essex and Kent).

Ratios of Areas Under Crop per 1,000 Acres.

Year.	Fall Wheat.	Spring Wheat.	Barley.	Oats.	Peas.	Beans.	Rye.	Buck wheat.	Corn.	Potatoes.	*Other roots.	Hay and Clover.	Mixed Grains.
1912.....	57.6	8.5	44.6	180.1	15.3	4.8	7.3	14.3	47.0	11.0	12.8	233.1	31.0
1911.....	58.2	9.3	42.2	187.7	31.2	3.6	6.9	13.1	44.6	11.3	13.4	229.6	33.8
1910.....	51.9	9.0	43.7	192.5	28.2	3.5	6.0	13.6	45.2	11.8	14.5	233.7	34.8
1909.....	46.5	9.5	48.8	189.0	26.7	3.2	6.6	12.4	42.9	11.9	14.5	226.5	23.3
1908.....	48.1	10.1	51.9	190.3	28.1	3.3	6.2	9.9	37.7	11.8	14.9	230.2	32.3
1907.....	47.9	10.2	54.3	207.7	24.1	3.4	4.8	8.0	36.2	12.6	15.1	233.0	31.4
Average (5 years):													
1907-1911.....	50.6	9.6	48.3	194.6	25.7	3.4	6.2	11.4	41.8	11.9	15.0	228.6	33.1
Average (20 years):													
1892-1911.....	57.5	29.2	51.7	176.1	48.3	3.4	9.1	8.8	32.0	12.5	14.4	208.5	....

*This includes Carrots, Mangels, Turnips and Sugar Beets.

Market Prices per Bushel or per Ton.

Year.	Red Wheat, per bush.	Hard Red Winter, per bush.	Barley, per bush.	Oats, per bush.	Wheat, per bush.	Barley, per bush.	Milk, per bush.	Stocks, per bush.	Wheat, per bush.	Barley, per bush.	Stocks, per bush.	Wheat, per bush.	Barley, per bush.	Stocks, per bush.
1912	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0	116.0
1911	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
1910	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0
1909	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
1908	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0
1907	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0	111.0
Average (5 years) 1907-1911	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0
1911	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0
Average (10 years) 1902-1911	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0	114.0
1911	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0	115.0

* Average for twenty years, 1892-1911.

Horses and Cattle.

Year.	Horses all ages.				Cattle.	
	Number on hand, July 1, 1912	Value.	Horses sold.		Milk cows on hand.	
			Number, June 30, 1912	Value.	Number, July 1, 1912	Value.
1912	712,139	\$109,089,314	101,311	\$15,795,139	1,004,177	\$49,899,961
1911	701,946	\$106,473,896	100,741	\$15,404,714	1,000,000	\$47,517,560
1910	724,284	\$9,737,431	97,000	\$15,345,400	1,000,000	\$46,899,000
1909	720,000	\$1,000,000	96,000	\$1,000,000	1,000,000	\$45,000,000
1908	730,471	\$1,000,000	71,204	\$1,000,000	1,110,274	\$46,000,000
1907	705,000	\$1,000,000	65,000	\$1,000,000	1,100,000	\$45,000,000

* Not taken in 1907.

Year.	Cattle.					
	Other cattle on hand.		Total on hand.		Sold or slaughtered.	
	Number, July 1, 1912	Value.	Number, July 1, 1912	Value.	Number, June 30, 1912	Value.
1912	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000
1911	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000
1910	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000
1909	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000
1908	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000
1907	1,000,000	\$1,000,000	1,000,000	\$1,000,000	1,000,000	\$1,000,000

* Not taken in 1907.



Grand Champion Shorthorn Cow at Toronto, Ottawa, and Western Fairs, in 1912.

Sheep, Swine and Poultry.

Year.	Sheep and Lambs.				Swine.	
	Number on hand, July 1, 1912.	Value.	Sold or slaughtered.		Number on hand, July 1, 1912.	Value.
			Number, June 30, 1912.	Value.		
1912.....	4,921,848	\$ 6,161,546	125,367	\$ 1,614,390	2,528,145	\$ 14,141,309
1911.....	4,949,319	6,315,091	109,111	1,605,995	2,744,952	14,505,867
1910.....	4,955,101	6,447,018	104,600	1,540,995	2,855,049	15,908,504
1909.....	5,535,497	6,907,490	155,141	1,797,590	3,351,267	11,144,105
1908.....	5,445,898	6,000,960	145,520	1,607,500	3,828,545	15,108,309
1907.....	5,190,085	5,908,100	*	*	3,845,600	14,174,105

* Not taken in 1907.

Year.	Swine.		Poultry of all classes.			
	Sold or slaughtered.		Number on hand, July 1, 1912.	Value.	Sold or slaughtered.	
	Number, June 30, 1912.	Value.			Number, June 30, 1912.	Value.
1912.....	2,998,874	\$ 26,865,149.51	281,385	\$ 4,147,355	1,500,865	\$ 2,505,800
1911.....	1,867,957	21,418,430.11	11,945,730	3,990,715	5,911,912	2,930,084
1910.....	1,844,406	20,908,009.15	19,400,092	4,000,000	4,004,715	2,114,014
1909.....	1,980,125	21,107,140.15	18,080,560	4,411,590	4,777,940	2,567,070
1908.....	2,153,944	21,008,400.15	18,080,560	4,400,000	4,000,000	1,600,000
1907.....	*	*	13,138,070	4,004,390	*	*

* Not taken in 1907.

Year.	Poultry on hand. June 30, 1912.				Total value of live stock sold or killed, June 30, 1912.
	Turkeys.	Geese.	Ducks.	other (see).	
	No.	No.	No.	No.	\$
1912.....	607,845	107,374	418,367	11,400,814	\$1,955,229
1911.....	608,942	105,870	400,075	11,379,730	10,979,300
1910.....	579,315	107,730	398,000	11,374,000	11,565,730
1909.....	579,315	107,730	398,000	11,374,000	11,565,730
1908.....	579,315	107,730	398,000	11,374,000	11,565,730
* 1907.....	579,315	107,730	398,000	11,374,000	11,565,730

* Not taken in 1907.

Wool Clip.

1912, lbs., 3,603,419; 1911, lbs., 3,790,798; 1910, lbs., 4,021,200; 1909, lbs., 4,515,211; 1908, lbs., 4,150,517; 1907, not taken; 1906, lbs., 4,342,985.

Farm Property, Implements and Live Stock.

Year.	Land.	Buildings.	Implements.	Live Stock on hand.	Total.
	\$	\$	\$	\$	\$
1912.....	738,729,368	335,141,520	86,231,310	235,848,942	1,405,950,940
1911.....	723,993,419	317,876,962	84,969,426	214,739,424	1,341,469,332
1910.....	709,965,425	306,517,841	81,570,981	194,416,637	1,288,410,384
1909.....	680,789,659	295,690,856	77,790,754	184,747,960	1,241,019,109
1908.....	671,521,018	288,189,121	74,485,730	186,014,756	1,220,211,625
1907.....	674,605,427	284,672,238	72,910,875	189,184,132	1,221,572,672

Farm Values per Acre.

Year.	Farm values, average per acre occupied.					Values: buildings implements and live stock, per acre, cleared.
	Land.	Buildings.	Implements	Live Stock.	Total.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1912.....	30 47	13 46	3 46	9 07	56 46	44 80
1911.....	29 33	12 88	3 44	8 70	54 35	42 94
1910.....	28 37	12 41	3 30	7 87	51 95	40 67
1909.....	27 58	12 06	3 15	7 49	50 29	39 29
1908.....	27 41	11 77	3 04	7 59	49 81	38 82
1907.....	27 35	11 67	2 99	7 77	50 08	38 75

Cheese Factories.

Year.	Cheese factories.				Butter plants at Cheese factories.			
	No. of factories.	Milk used for cheese.	Cheese made.	Value.	No. operated.	Butter made.	Value.	Value of cream and casein sold.
		Lbs.	Lbs.	\$		Lbs.	\$	\$
1912.....								
1911.....	1,077	1,369,856,080	127,123,016	15,491,406	157	*1,962,768	491,448	164,412
1910.....	1,109	1,451,244,620	145,521,390	14,491,410				
1909.....	1,177		125,611,259	14,192,918				
1908.....	1,177		120,624,436	13,106,980				

* Including 216,232 lbs. whey butter, value \$49,851.

Creameries.

Year.	No. of Creameries.	Butter made.	Value.
		Lbs.	\$
1912.....			
1911.....	120	13,728,205	3,268,303
1910.....	121	12,897,659	3,016,135
1909.....	97	9,045,296	2,175,965
1908.....	97	8,895,109	2,355,170

TORONTO MARKETS

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TORONTO MARKETS.

Live Stock, representative prices, April 4, 1913:

Export cattle, choice	\$6 75	to	\$2 10
Export cattle, medium	5 85	to	6 50
Export cattle, bulls	5 00	to	5 85
Butcher cattle, choice	6 75	to	7 10
Butcher cattle, good	6 40	to	6 75
Butcher cattle, medium	5 85	to	6 40
Butcher cattle, common	5 00	to	5 75
Butcher cows, choice	5 25	to	5 85
Butcher cows, good	4 75	to	5 25
Butcher cows, medium	4 25	to	4 75
Butcher cows, common	3 00	to	3 75
Butcher bulls, choice	5 25	to	5 85
Butcher bulls, good	4 75	to	5 25
Butcher bulls, rough	3 00	to	4 00
Feeders, 950 lbs.	5 00	to	5 85
Feeding bulls	3 50	to	4 50
Stockers, 800 to 900 lbs.	5 00	to	5 85
Stockers, medium	4 25	to	5 00
Stockers, light	3 75	to	4 25
Cutters	2 75	to	3 75
Canners	2 25	to	2 75
Milkers, choice, each	50 00	to	70 00
Milkers, common and medium, each ..	30 00	to	45 00
Springers	50 00	to	70 00
Calves	8 00	to	9 50
Lambs	8 00	to	9 50
Sheep, light ewes	6 50	to	7 25
Sheep, heavy ewes	5 50	to	6 50
Sheep, bucks and culls	3 00	to	5 00
Hogs, fed and watered	9 85	to	0 00
Hogs, f.o.b.	0 50	to	0 00
Sows, f.o.b.	8 00	to	0 00

Produce, wholesale, October 1, 1912:

Eggs, fresh, per doz.	\$0 24	to	\$0 26
Eggs, new laid, per doz., case lots ..	0 28	to	0 00
Cheese, twins, new	0 15	to	0 15½
Cheese, large, new	0 14½	to	0 15
Butter, creamery prints	0 28	to	0 29
Butter, dairy prints	0 25	to	0 26
Butter, inferior (bakers')	0 22	to	0 23
Honey, buckwheat, per lb., in tins, ...	0 07	to	0 00
Honey, buckwheat, per lb., in barrels ..	0 06½	to	0 00
Honey, strained, clover, per lb., in 60-lb. tins	0 11	to	0 12
Honey, strained, clover, per lb., in 5 to 10-lb. tins	0 10	to	0 12
Honey, new comb, per doz.	2 50	to	0 00
Poultry, live chickens, per lb.	0 13	to	0 14
Poultry, fowl, per lb.	0 11	to	0 12
Poultry, ducks, per lb.	0 09	to	0 10

Poultry, ducklings, per lb.	0 11	to	0 12
Poultry, live turkeys, per lb.	0 15	to	0 16
Beans, prime, per bushel	3 00	to	0 00
Beans, hand-picked, per bushel	3 10	to	0 00
Potatoes, New Ontario, per bag	0 85	to	0 00
Potatoes, New Ontario, per bag, car lots	0 70	to	0 75

Produce, Retail, April 4, 1913:

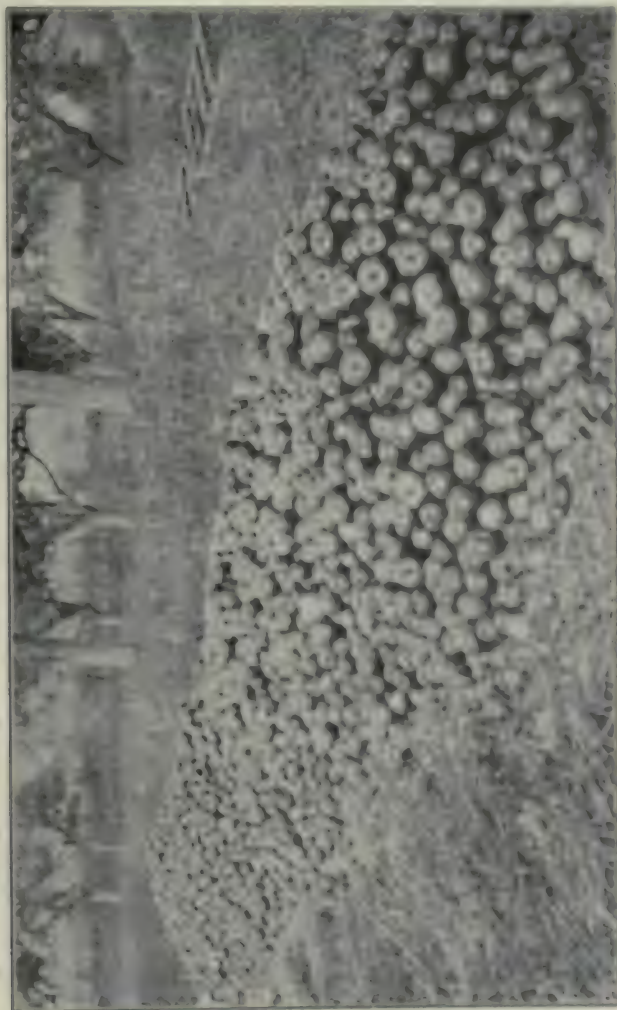
Fall wheat, per bushel	\$0 92	to	\$0 95
Oats, new, per bushel	0 39	to	0 00
Goose wheat, per bushel	0 88	to	0 90
Barley, per bushel	0 58	to	0 60
Rye, per bushel	0 65	to	0 00
Peas, per bushel	1 00	to	1 10
Hay, timothy, per ton	15 00	to	17 00
Clover and mixed hay, per ton	13 00	to	14 00
Cattle hay, per ton	8 00	to	9 00
Straw, bundled, per ton	14 00	to	15 00
Rye straw, per ton	16 00	to	18 00
Eggs (new-laid), per dozen	0 25	to	0 27
Butter, choice dairy, per lb.	0 30	to	0 35
Chickens, per lb.	0 25	to	0 00
Fowl, per lb.	0 20	to	0 22
Geese, per lb.	0 18	to	0 20
Ducks, per lb.	0 25	to	0 00
Turkeys, per lb.	0 25	to	0 28
Potatoes, per bag	0 95	to	1 00
Apples, per barrel	2 00	to	3 00
Dressed hogs	12 00	to	13 25
Beef, forequarters	8 00	to	8 50
Beef, hindquarters	10 00	to	10 50

Fruit Market, wholesale, October 1, 1912:

Cantaloupes, case	\$0 75	to	\$1 00
Cantaloupes, baskets	0 35	to	0 40
Cabbages, crate	1 25	to	0 00
Watermelons, each	0 45	to	0 55
Oranges, late Val., crate	4 00	to	4 75
Lemons, crate	5 00	to	6 50
Peaches, leno, 11-quart (Aug., 65c. to 85c.)	0 50	to	0 65
Peaches, leno., 6-quart (Aug., 35c. to 45c.)	0 25	to	0 35
Peaches, flat	0 20	to	0 30
Tomatoes, native, basket	0 20	to	0 25
Blueberries, 11 qt.	1 25	to	1 50
California pears, boxes	3 00	to	0 00
Spanish onions, case	3 00	to	0 00
Celery, dozen	0 25	to	0 35
Egg plant, basket	0 25	to	0 35
Pears, 11-qt. leno basket	0 60	to	0 75
Plums, 11-qt.	0 60	to	0 75
Grapes, 6-qt.	0 20	to	0 25
Gherkins, 11-qt basket	0 75	to	1 00
Cucumbers, 11-qt basket	0 25	to	0 00

Fruit Market—Wholesale, April 4, 1913:

Spies, No. 1, barrel	\$3 50	to	\$4 00
Spies, No. 2	3 00	to	3 25
Spies, No. 3	2 00	to	2 25
No. 1 Kings	4 00	to	0 00
Baldwins	3 00	to	0 00
Oranges, navel, Cal., crate	3 75	to	4 75
Grape fruit, box	3 75	to	4 00
Lemons, crate	3 75	to	4 25
Cranberries, barrel	14 00	to	0 00



Baldwin Apples, two bushels packed from five trees, Weyland Co., in 1912.



The Agricultural College, Guelph.



Macdonald Institute and Macdonald Hall, Guelph.



Government Building, Exhibition Grounds, Toronto.

AGRICULTURAL INSTITUTIONS.

The Agricultural College and Experimental Farm.

This institution, established at Guelph about forty years ago, is maintained by the Province of Ontario. There are fifty professors, lecturers, demonstrators and other officers in the faculty of instruction, including those of the Macdonald Institute, and they deal with such subjects as field, dairy, poultry and animal husbandry; veterinary science; and every other subject at the basis of a scientific agriculture; also manual training, home economics, and others. The aim is the education of farmers' sons in scientific and practical agriculture and of young women in domestic science. The regular courses of study are from two to four years. Students come from all parts of the world. There were 1,055 in attendance during the calendar year 1912. Besides attending lectures, the pupils do farm work every alternate afternoon. The Farm covers an area of 700 acres, and there are all kinds of stock—beef and dairy cattle, horses, sheep, swine and poultry—with well equipped departments representative of each class; while bee-keeping, fruit and vegetable growing are also given due prominence. Among many other benefits shown, the Farm demonstrates, for example, what are the best crops for the Province, and the College unfolds that evidence to the students. A few illustrations follow. "It is believed that the O.A.C. No. 21 barley is the best variety which is now being grown on the farms of Ontario, and that it is produced more extensively than any other variety in this Province." Again, "Simply the difference in the average amount of hull of the Joannette and the Pioneer varieties of oats, as represented in these experiments, if applied to the whole of Ontario, would make a difference in the annual value of the oats grown in the Province of fully four million dollars." Further "In the average results for the fourteen years the alfalfa has produced an annual yield of upwards of twenty tons of green crop, and of nearly five tons of hay per acre." Moreover, in the matter of crop for permanent pasture, "There is one plot of this mixture in the Experimental Department which was seeded ten years ago, and which has produced crops annually during that period of time." "Another plot of a similar nature remained twelve years after it was first seeded. The crop was converted into hay each year, and during the eleven years which it was cropped it produced an average of a little over five tons per acre per annum." And it has been proven

that by using plump or larger seed there will in ordinary circumstances be a yield of 20 per cent. more crop than if the seed were small or broken as they came from the fanning mill. In other departments, such as Chemistry, treating of fertilizers, cattle feeds, well water, etc.; Entomology, of insect pests, etc.; Botany, of weeds, fungus diseases, etc.; Bacteriology, of seed inoculation, etc.; Dairy Husbandry, of cow testing, milk and cream testing, and so on, the information is all in the line of practical progress. In the department of Physics, and on the subject of drainage, it may be said that perhaps no single line of development presents such possibilities. Since 1906 the staff of the College had drained over 44,000 acres in the Province, and through the demonstrations given the farmers themselves had drained about 130,000 acres. According to reports received from farmers, that drainage had increased the yield about \$20 per acre, with the result that the annual return is now \$2,600,000 better. As increase in drainage continues these figures must be largely increased. There are at least twenty-five to thirty million acres of land in Old and New Ontario to be drained, much of which till then is entirely useless, and the remainder only partially productive. And when this drainage is completed the value of all Ontario's farm products will be counted not in millions but in billions of dollars. In the department of Forestry, it is stated that Southern Ontario has 20,000 square miles with 9 per cent. of inferior woodland, yielding only a small revenue. Much may be urged in favour of the policy of reforesting the waste land. It will ensure a supply of wood, protect the headwaters of rivers, provide breeding ground for game, afford object lessons in forestry, pay financially, and give the people an opportunity of development in conditions obviating failure and making success.

Additional to the regular courses, there are Short Courses of from two to four weeks' duration. Hundreds of farmers attend these courses and highly appreciate them. Returning in June, they see the results of spring planting, elicit information by questioning, and manifest intense interest. Many a boy attending such study for the first time is encouraged to come back to the College later on for regular work.

The work at the College among rural school teachers goes with them as a great inspiration on their return to the country schools. Two courses are under the direction of the Professor of Nature Study, whose chief function as Director of Elementary Agricultural Education under the Department of Education is to interpret the teachings of the College and the findings of the Experimental Farm

to the schools throughout the country. To the first course the teachers come at the close of the second term in the Normal Schools at Easter and remain for ten weeks—till midsummer. The second course is for teachers of experience, who can get away from their schools only during the summer vacation. This course is growing in popularity. About 200 teachers attend each year. Followed up by correspondence, magazines, and other literature, the influence of this work on rural teaching must accomplish much among the school children in country places of the Province.

Thousands of farmers visit the Experimental Farm during the summer. They are conducted over the grounds, where the work is explained and some of the most important results emphasized.

The quantity of instructive literature distributed throughout the Province is such that if practically applied it would double or treble the annual output of the farm.

Besides the College at Guelph there is a well-equipped dairy school at Kingston and an Experimental Farm at Monteth, Northern Ontario. The Hon. Martin Burrell, Dominion Minister of Agriculture, says: "If you can teach a man to help himself you are doing infinitely better and more efficient work for the State and by the State than if you spoon-fed him. Therefore the valuable character of the work being done by such institutions as the Guelph and Macdonald Colleges, and other institutions of this sort, cannot be overestimated or over-encouraged."

Macdonald Institute.

This Institute, the gift of Sir William Macdonald, of Montreal, is maintained by the Province. It is connected with the Agricultural College, and its object is the education of farmers' daughters in domestic science or the various branches of house-keeping, cooking, sewing and laundry work. Considering that 95 per cent. of the women of the Province keep no servants, and do their own work, the education of the Institute is a great aid in the lessening of drudgery. The door is open also for the daughters of the people in towns and cities. "That school," says the President of the College, "has been patronized to the extent that for this year, 1912, on the first of January, we have eighty applicants more than we can accept. Every room is full to-night, and we are turning the city and town people down in favour of the farmer's daughter. The work we teach in this school is so important that the girls are willing to give up the ideals they had in life to learn to do housework, and I have never known one to go out of

the institution without saying to us that the happiest days of their lives were spent among the girls there, and that they learned a lot of short methods of doing work, and they appreciate very much the instruction they received. The women who leave that institution become the leading citizens in their community."

Total number of students in the calendar year 1912, 396.

The Ontario Veterinary College, Toronto.

The progress of the College has been steady, and some important branches of the course have been amplified so as to make instruction more thorough and more valuable to the students. The laboratory method of teaching has been extended from year to year; courses in laboratory pharmacy and physiology have been introduced, and the courses in histology and pathology have been largely extended. The field of veterinary science is no longer a limited one of mending the broken parts of certain animals, but the richer, broader work of controlling animal diseases throughout the earth, the saving from economic losses by animal plagues, and the study of animal food problems and attention to food inspection determining physical strength.

Addressing a class of graduating students, Professor W. H. Hoskins, Pennsylvania University, said of the College and its products: "We in the United States owe, indeed, a great debt for the many young men educated under your fostering care. My native State of Pennsylvania, the keystone of the arch, has received more than 150 of your graduates. Our country as a whole has welcomed to its forty-seven States more than 1,700 men educated from the institution from which you are about to emerge. Many of this number have rendered distinguished services in every aspect of our work."

An average of eighty students per year have graduated since the founding of the College, 1861. About 300 students attended the session of 1912-13.

The Ontario Veterinary Association is the pioneer of its kind in America and has done much to advance the interests of veterinary science in the Province of Ontario.

Experiment Stations.

The Government had established fourteen stations for the purpose of testing different varieties of fruit and determining their local suitability. The majority of them having served their end, the number is reduced to three, including the fine fruit farm at Vineland, on which the Government has expended about \$125,000. Here the work is centralized.

Demonstration Farm.

This Farm is at Monteith, Northern Ontario, and is operated by the Ontario Government. It comprises 800 acres of wooded land, 65 acres of which are under cultivation. The Farm aims at producing the best crops and live stock; the testing of grains, roots and vegetables; the distribution of suitable grains, etc., to the settlers at moderate prices; and the establishment of a live stock breeding centre, from which pure-bred animals will be sent throughout Northern Ontario. Recent fall wheat, despite a bad winter, was a banner crop; and in some other crops excellent results have been obtained.



Percherons on Parade.

DISTRICT AGRICULTURAL REPRESENTATIVES.

These officials, numbering thirty-five, exclusive of assistants, are Agricultural College graduates who act in the capacity of representatives of the Department of Agriculture. They are distributed among various farming communities, where they give practical assistance for the improvement of farm conditions in their neighbourhood; they encourage cow-testing and improvement in the standard of live stock; give orchard and other demonstrations, test commercial fertilizers, and make drainage surveys; manage exhibits at fall fairs, and get up competitions in live stock judging; develop a progressive county spirit, as seen in special county organizations; organize Farmers' Clubs, Co-operative Societies and other Associations; attend Farmers' Institute meetings, and co-operate with the Institute branch by holding short courses in judging stock and seed; address meetings, and distribute thousands of bulletins and newspaper articles; teach agriculture in high schools (with laboratory illustration), and do much toward interesting the public schools, and so on. At a Convention of Dairymen's Associations a District Representative said: "The people are alive to the educational interests of the boys and girls growing up on the farm. You cannot tell me that you cannot teach lessons in dairying or any other agricultural subject to boys and girls from six to ten years of age, because I have done it successfully, and lots of other teachers have done it. The big difficulty is that we have not been training along these lines sufficiently. I can take a dozen tubes of milk before a class of public school children, and by allowing them to help me I can teach them the very lessons that several speakers have been trying to teach the grown-up men at these meetings—I can teach them in a way that they will never forget." The office of a Representative, on the main street, is the local centre of organized activity, where many farmers call and have skilled advice, or the benefit of reading the agricultural papers, or of seeing the best kinds of tested grain, grasses, forage crops, roots and seeds. In short, the District Representative system of agricultural education far excels the demonstration farm and many other suggested methods of help. It is the gospel of the production of double returns from the ordinary farm, and the specialist preaches it straight to the farmer.



One of the many classes in Agriculture conducted by District Representatives.



A Drainage Demonstration.

AGRICULTURAL ORGANIZATION.

The farmers of Ontario are actively organized, except in co-operation, where only beginnings have been made. The dairymen, stockmen, horsebreeders, poultrymen, fruitgrowers, etc., have each a special association. These associations are under the supervision of the Ontario Department of Agriculture, and receive financial aid from the Ontario Legislature. Their object is the advancement of their particular interests. Each association meets in convention annually, for the exchange of ideas and the discussion of important questions. Reports of these conventions are issued by the Department for general distribution.

The Ontario Agricultural and Experimental Union.

This society was organized in 1879, and is an outgrowth of the Ontario Agricultural College. It has a membership of fully five thousand farmers. In common with various other agencies, such as farmers' associations, institutes and clubs, experiment stations, and agricultural classes in schools, the co-operative system of the Experimental Union secures and imparts information; but, in addition, it enables the farmer to find out for himself, under the test of definite plans, how things will work out on his own farm. Assisted by the Agricultural College, whose experience is the basis of methods and materials, the co-operative experimental work is under the direct supervision of the Experimental Union. The most of this work is conducted by the farmers themselves on their own farms, in agriculture, horticulture, forestry, poultry-raising, bee-keeping, and agricultural chemistry.

In agriculture alone there are co-operative experiments on 4,500 farms, covering all the most important farm crops in the Province, and dealing with varieties of crops, mixtures of grains and grasses, application of commercial fertilizers and farmyard manures, and quantity of seed per acre. This means much in the advancement of agriculture, each experiment being an object-lesson to the farmers of the locality around the experimental plots, and the work being the source of new seed grains that yield much more than the older varieties. Different varieties of seed having been sent from the College, the farmers report back as to how they develop, as to weight in grain and straw, etc., and thereby give information as to what is done in the different parts of the Province. Over 60,000 experiments in agriculture have been made since 1886.

Again, the Experimental Union has been developing a system of experiments in elementary agriculture, horticulture and forestry, in connection with the public schools, either in the school grounds or at the homes of the pupils living near by.

As furnishing results of experiments for reports, the Union is of great educational value to the country at large. Nearly thirty thousand copies of the Annual Report of the Experimental Union have been printed and distributed by the Ontario Department of Agriculture.

Farmers' Institutes.

The Institute is one of the best agencies of education on advanced methods of operating the farm. Local meetings are addressed by speakers delegated by the Department, and there is almost no limit to the variety of interesting topics embraced under agriculture, horticulture, floriculture, live stock, equipment, farm buildings, and the social side of country life. There is also an annual convention of the leading Institute workers, where valuable subjects are unfolded and discussed. At special Institutes in many places short courses are given in seed and stock judging, and they are very popular, the total attendance reaching about 50,000; there are also dairy meetings, with a total of about 14,000; and there is the "Better Farming Special" to widely distant points on the railroads, which gives samples or exhibits under Field Husbandry, practically every line of agricultural interest, and bringing out a total attendance of over 18,000. Again, it has been repeatedly demonstrated that in those districts where farmers co-operate in the production of milk, beef, fruit, or any other line, their success is greater than farmers that work practically alone or in isolated districts. There are about one hundred Institute districts all over the Province, with a membership of fully 20,000. At the Regular and Supplementary Meetings for the year ending June, 1912, the attendance was 86,460; and at the Special Institutes the attendance totalled 87,011, or a sum total of 173,471.

Women's Institutes.

Motto: "For Home and Country."

This is one of the greatest organizations in Canada. A comparatively new society, its work is attracting attention not only throughout Ontario but in the other provinces of the Dominion. It is composed of women of social standing and of all denomina-



Women's Institute Lecturers.



Boys and girls at one of the twenty-five Rural School Fairs held during the past year in Ontario.

tions, banded together for the furtherance of principles and institutions worthy of the best efforts of womanhood. Avoiding sensational methods to gain publicity and notoriety, and discouraging formalities, the Institute quietly aims to make the life of the lonely and isolated brighter, and it spreads the gospel of right living, physical and moral, all over rural Ontario. It gives due prominence to the duties and well-being of the household, and also expands its life and effort in the direction of community problems, civic improvement, the welfare of the child, the care and education of the defective, the provision and maintenance of rooms and wards in local hospitals, founding or helping libraries, advancing education, and so on. Under the Institute's influence, towns and villages have been cleaned up and better lighted, trees have been planted, and walks have been improved or renewed; the sanitation, equipment and decoration of the school have been looked to, the surroundings beautified, and the children supplied with seeds and plants for the production of flowers and vegetables; and the moral atmosphere of many communities has been cleared. The Institute is no blind, narrow, abstract effort. Lectures are given to its members by qualified speakers, and valuable literature provided and read, on a wide variety of topics, such as House Planning, Labour Saving, Food Values, Care and Feeding of Infants, Poultry Raising, Gardening, Hygiene for Rural Schools, Water Supply, Bacterial Life, Tuberculosis, Ambulance Work, Banking, Law, and many others. And upon its own initiative the local organization holds eight or ten meetings each year. In an address of welcome at a Convention of Women's Institutes in Toronto, a speaker said: "You are one of the best elements that can possibly be gathered together in the midst of our city for the regeneration and the uplifting and the development of civilization in the city and in the country and in the world." There are about 100 Institute districts, with 750 local organizations and a membership of nearly 25,000. The total attendance at meetings for a year runs up to 180,000.

• Farmers' Clubs.

The object of this organization is to encourage and maintain a more intelligent interest in agriculture in the widest sense; to hold meetings for information, and for debate and study in order to self-improvement; to give addresses relating to local conditions; to deal with the larger but unsectarian and non-political questions of the nation affecting the farmer, socially and financially; to raise the calling of the farmer to its rightful place in the state; and to use

success and power to make Ontario still more desirable as a Province in which to live. It aims at experiment work, and the securing of the best varieties of grains, roots, corn, etc.; at the proper breeding of horses, cattle, sheep and hogs; at seed and stock judging; cow-testing; the due care and handling of milk; attention to the sanitary surroundings of stables, milk houses, factories, and creameries; the getting of good roads, rural mail delivery, telephones, etc.; the interesting of the farm boy in experiment work, testing grain, etc., cow-testing, and feeding of stock; the hastening of agricultural science and practice into public schools; and the co-operation of farmers in purchasing supplies and in the marketing of farm produce. Local, definite, and concrete, it is one of the most popular forms of organization; and through its medium much effective work is done. The number of clubs is 230.

Dairymen's Associations.

In the year 1867 the dairymen of Ontario who were interested in the manufacture of cheese and butter formed a cheese and butter makers' association, with a view to establishing uniformity in methods and stimulating a wider and keener interest in the dairy industry. Later the original organization developed into the Dairymen's Association of Eastern Ontario and the Dairymen's Association of Western Ontario. Much was done at the annual conventions of these Associations to improve dairy conditions. Then in 1879 the Western Association, and in 1880 the Eastern, undertook to send instructors to give assistance to the makers in the factories, which did much to improve conditions and to establish uniformity in Ontario cheese and butter. This work developed to such an extent that in 1907 the Provincial Department of Agriculture came to the assistance of the Associations by appropriating funds to support a staff of instructors sufficient to make periodical visits to all the factories and creameries in the Province. The work is now directed by the Department, which has the co-operation and advice of the Associations. These Associations also hold district dairy meetings in the various sections, emphasizing such features as are of greatest importance in each. The Western Association has, for a number of years, held a dairy show in connection with its annual convention. The reports of the Associations are published each year by the Provincial Department for distribution generally among the factory-men and farmers of the Province.

Agricultural Societies.

There are in the Province 375 Agricultural Societies, all of which, with the exception of eight, hold exhibitions during September and October. The rest are stock-owning Societies, which do an excellent work in improving the live stock of their members, and receive grants from the Government according to the number of animals kept and also their membership. The Societies holding exhibitions receive grants to the extent of about one-third of their average expenditure for agricultural purposes during the three previous years. These Societies also hold Seed Fairs and Stallion and Bull Shows in the early spring, and about one-half of them conduct competitions among standing field crops, for all of which purposes certain Legislative grants are made.

The Field Crop Competitions have developed enormously since 1907, when they were first inaugurated by the Superintendent of Agricultural Societies. In that year only ten Societies competed, while in 1913 the total is 175. The number of individual entries has also increased largely, 3,000 farmers having entered last year with an acreage of 30,000. This is one of the most important works ever undertaken by Agricultural Societies, and, since its inception, winners in these competitions have been able to sell their seed grain at an advance over market prices of 350 per cent. in some cases, while the demand exceeds the supply.

A sum of \$10,000 has also been set aside by the Government to reimburse Societies which suffer losses in gate receipts owing to wet weather. In 1911, owing to the unusually wet period during the time exhibitions were held, this fund was only just sufficient to meet the large claims made on it.

Association of Fairs and Exhibitions.

This is the central organization of the Agricultural Societies of Ontario, and it meets in convention each year in February. It is attended by over 500 delegates from every part of Ontario, and matters of interest to the Societies receive due consideration. It is through this body that the Government is approached for further grants or for amendments to the legislation affecting Agricultural Societies.

Live Stock Associations of Ontario.

There are a number of Provincial Associations in Ontario representing the different classes of stock. They are: The Ontario Horse Breeders' Association, with a membership of 778; the Dominion Cattle Breeders' Association, with 852; the Dominion Sheep

Breeders' Association, with 354; the Dominion Swine Breeders' Association, with 578; the Ontario Poultry Association, with 650; the Ontario Berkshire Society, with 125; the Ontario Yorkshire Society, with 175.

These Associations are organized for the purpose of looking after the interests of the classes of stock which they represent. One of the most important things which has been taken up by them is the question of transportation. Upon representations made to the railway corporations, very considerable reductions in the freight rates for pure-bred live stock have been conceded. They have also secured additional important shipping facilities and conditions: co-operative shipping of pure-bred stock is arranged, and cars of pure-bred stock are sent regularly once each month from Ontario to the Western Provinces. And they are very closely associated with the records for pure-bred stock in Ontario.

In addition to the Provincial Associations, there are the Record Associations for Canada, practically all having their headquarters in Ontario, owing to the fact that a very large proportion of the Breeders of pure-bred stock reside in this Province.

Two Provincial Stock Shows are also held under the auspices of these Associations, the Ontario Provincial Winter Fair at Guelph, and the Eastern Ontario Live Stock and Poultry Show at Ottawa.

Poultry Associations.

There are 45 recognized local Associations, with a total membership of about 2,000. A recognized Association is one that is entitled to receive a government grant and to have a lecturer supplied by the Department at a meeting held in most cases at the time of the Association's Annual Poultry Show. Each Association must hold a show annually. The total number of entries at the shows held in 1912 was 24,221, and the prize money paid was \$10,000. The work of these Associations adds much to the interest in improvement of poultry conditions. Mr. Geo. Robertson, President, Poultry Association of Eastern Ontario, in an Association meeting said:—"Poultry kept under proper conditions will pay, and pay just as well as anything else on the farm. In the first place, they must be properly housed, properly fed and cared for, and they must also be properly bred—the last is not the least in importance." Prof. Elford said:—"The average farmer knows how to grow poultry produce better than he does how to market it. We producers have failed in this. There is nothing that pays nearly so well as proper feeding for the market." And speaking of eggs,

the Hon. W. J. Hanna said:—"The thing we must keep in mind constantly is that our co-operative associations are not only for the purpose of producing the superior article, and in quantities, but for marketing them and marketing them as ours. We propose for the superior article to get not only the price for it but the credit of producing it, and to get that credit from the person consuming it. We must employ and pay for the best skill in marketing, and command the best skill in organization. Former attempts have fallen down owing to their failure to recognize that marketing and business methods are things requiring a training and experience that the grower can seldom have." Valuable addresses of a practical nature are given at the annual meetings of the Eastern and Western Associations.

The Ontario Beekeepers' Association.

This Association was organized in 1880 and has had a continuous existence and gradual growth up to the present date. It consists of a central organization and a number of County Beekeepers' Associations which are in affiliation with it. Its purpose is to advance the business of the keeping of bees and the production of honey in every way possible, and its efforts have been directed largely along educational lines. A three days Annual Convention is held each year at the time of the Fruit, Flower and Honey Show in Toronto in November. The sessions of this Convention are devoted to the discussion of practical methods of the management of bees and the selling of the product. In addition to the Annual Convention, County Associations hold spring and fall meetings and an occasional apiary field day during the summer. Up till the appointment of the Provincial Apiarist in 1909, no very serious effort was made to extend the operations of the Association, and at that time there were something like 300 members and nine County affiliated societies. As one of the duties of the Provincial Apiarist is to assist in the organization of beekeepers, the number of County Associations has been increased until there are, at the time of writing, 26 Affiliated Societies, and the total paid up membership is about 1,000. It is growing very rapidly, having doubled within the last year. The Association has been successful in securing legislation for the prevention of the adulteration of honey, also to prevent the spraying of fruit trees while in full bloom with poison which would be injurious to bees. By far the most important legislation which has been secured by this Association is the Ontario Foul Brood Act, by which an annual vote of

\$4,000 is expended for the assistance of beekeepers in the control of infectious diseases amongst their bees. This money is used in sending Apiary Inspectors to the different apiaries where disease is suspected, and in addition to detecting disease these Inspectors act as practical instructors and demonstrators, teaching beekeepers improved methods of management of their apiaries. In connection with this, Apiary Demonstrations are held in different counties where they will do the most good. These meetings are very much appreciated, and during 1912 fifty such meetings were attended by an average of 30 beekeepers each. Another very important feature of the work of the Association is the annual Crop and Price Report. It is made on the crop taken by correspondence from the members and considered by a Committee of experts who forecast for the benefit of members the prices for honey which are likely to prevail during the coming fall and winter. This work has been in operation for about ten years and has been of great benefit in standardizing the price of honey throughout the Province. The future development of the work of the Association will likely be along co-operative lines. The Provincial Apiarist says there is estimated to be about 10,000 beekeepers in Ontario keeping 300,000 hives of bees and producing annually something like 5,000 tons of honey.

The Ontario Plowmen's Association.

The object of this Association is the advancement of agricultural interests by encouraging its members to give greater attention to the thorough cultivation of the soil, establishing branch associations, disseminating useful information regarding fertilization and cultivation, interesting farmers' sons in becoming first-class plowmen that the yield and quality of field crops may be increased, encouraging annual provincial, county and township plowing matches, awarding premiums, and adopting any other means in the direction of progress.

The Ontario Fruit Growers' Association.

The Ontario Fruit Growers' Association as a body was incorporated over fifty-four years ago by Act of the Canadian Parliament. This Association has a very large membership among the commercial fruit growers of the Province, and has always taken a leading part in fruit matters of both Provincial and Dominion importance. Notable among the movements that it has inaugurated are the Fruit Marks Act, now known as the Inspection and Sales Act, the fruit experiment stations of the Province, demonstration



Planting Maize at Agassouf.

orchard work in pruning and spraying, introduction of many of our best varieties of fruits, the preparation and publication of lists of fruits suitable to the different districts, the holding of a large fruit show in the fall at a time when our apples are at their best, the showing of our fruits at the large exhibitions in other countries, making arrangements with the transportation companies for better rates and services, for both local and long distance shipments, etc. At present the Association employs an expert who is looking after the interests of the fruit growers in all transportation matters. The Association intends to continue its fight with the railway companies for better cars and more of them, for lower express and freight rates to the markets of the west beyond Winnipeg, and for better handling of the fruit for our Ontario and Quebec markets. The Association holds annually a convention of fruit growers at which are thoroughly discussed the very latest topics of interest along fruit growing lines. Its membership is open to all fruit growers who are kept in touch with the work of the Association and of the Department of Agriculture for the Province through the reports and bulletins which are issued from time to time. The Association claims that it has fathered the co-operative movement in the Province, and has aided in the organization of a majority of the local shipping associations and latterly in the formation of a central sales agency to handle the fruit of the smaller associations. In affiliation with it are practically all of the local and district fruit growers' associations in the Province and it counts in its membership the most prominent growers of all kinds of fruits. From a very small beginning it has grown to a membership of over 1,500 and is very proud of its record during all these years of its existence, counting that it has done a great deal towards the present state of the fruit industry in the largest fruit growing Province in Canada.

Horticultural Societies.

There are some seventy Horticultural Societies in Ontario, with a membership of 12,000, and each year adds to the list other cities, towns and villages anxious to enrol their members in the ranks of those who are earnestly endeavouring to improve and beautify their homes and surroundings.

The work of the Societies is extensive and varied. The grounds of public buildings, hospitals and schools are looked after and beautified with plants and flowers. Exhibitions are held. Seeds, bulbs and plants are distributed to members and also to school children, and prizes offered for plants and flowers grown by the latter. In

some towns and cities certain streets are selected, and prizes offered for the best kept front lawns and back yards, and also for the best kept blocks. Lawn and garden competitions are held among the members, those having professional gardeners showing in one class and amateurs in another. Monthly meetings are held and addresses given by experts in horticulture, and interest is thus maintained throughout the year. Each year in November the Ontario Horticultural Association, which is composed of delegates from all the Societies, holds its Annual Convention in Toronto, when addresses on the various phases of Horticulture are delivered, which are printed in the illustrated Annual Report of the Horticultural Societies, and for which there is a demand far exceeding the supply.

Ontario Vegetable Growers' Association.

This Association, which has a membership of 1,200 and has done excellent work in the past, greatly extended its line of operations in 1912. Tests were made of growing in Northern Ontario peas and potatoes for the use of its members in the older sections, and the results were very encouraging, in spite of the excessive rains and unseasonable frosts during the year. These experiments will be continued in 1913. For the first time since this Association was organized, Field Crop Competitions in celery, tomatoes and onions were arranged for, the Province having been divided into four districts for this purpose. The winners in these competitions also exhibited at Toronto and Ottawa Exhibitions, where substantial prizes were offered for these crops.

The co-operative method of purchasing seeds and supplies is gaining ground every year. One branch of the Association saved in seed alone during 1912 about 100 per cent. over and above all expenses. Another branch estimates that by co-operative purchase of supplies its members can save in original cost over \$1,000 and make from extra crop, due to high quality of seed, several thousand dollars more on the average each year.



In the Corn Field.

THE BOY IN AGRICULTURE.

In agriculture, the boy has arrived. He has been a long time coming. His way has been as tortuous as that of a wild grape vine, and at times his reluctant steps dragged distressingly. Yet the boy has actually arrived in agriculture, open-eyed, open-hearted, and open-handed. Early methods of imparting a knowledge of agriculture to the boy were more or less a failure because they largely lacked that most important of all things in teaching known as "the point of contact." There was too much book and not enough boy in the mind of the pedagogues. They were unwisely endeavoring to interest him in agriculture at the very beginning by forcing him to memorize a lot of learned and (to him) rather meaningless phrases. It was the old story of putting the cart before the horse. The new methods of instructing the boy in farming make him so enthusiastic in his work that he will hunt for definitions and analyses on his own account. And when the boy reaches for the book of his own accord he is very likely to read it with profit. Prof. S. B. McCready, Director of Elementary Agricultural Education for the Province, writes: "The aim of our work is to bring about the teaching of agriculture in the 5,000 rural schools of Ontario. This is a square deal for the country boys and girls! And by agriculture we do not mean a new subject, but a new direction, a new method, a new spirit, a new school."

The county agricultural representatives stand for the most modern and practical system of rural pedagogy. The schoolmaster is abroad in a new garb. He is a composite of a High School teacher, a Farmers' Club lecturer, a land surveyor and ditcher, and orchard pruner and sprayer, a live stock judge, a seeds expert, and a fraternity organizer. He is the latest product of the Ontario Agricultural College and of the Hon. James S. Duff, Minister of Agriculture. Thirty-five of these agricultural representatives are spread over the counties of the Province. They spend a good part of their time among adult farmers, and they are effectively reaching the youth on the farm. Their successful operation of School Fairs is especially encouraging. The agricultural exhibits by the boy and his sister at these shows do credit to all concerned, and give a happy augury for the future of our county fairs. A judging contest by young lads at the Corn Growers' Convention held at Chatham elicited the following eulogy from the eminent American agriculturist and specialist in corn growing, Professor R. A. Moore, of Madison, Wisconsin.—"As I look at the class of boys that you



Harvesting Corn (Maize) and Oats.

work I feel that you are starting in the right direction. When I saw these young boys studying corn with you, I thought it was well worth my while to come from the State of Wisconsin to see them cutting open a kernel and studying the germ and the different parts of the kernel."

Only a few weeks ago 25 boys, State prize winners in the corn raising contests of America, were brought all the way to Washington and kept for a week, to receive diplomas and tell of their successful methods. Now note carefully the real reason why the United States Government is encouraging these boys. The 1912 corn crop of the twelve Southern States increased in total yield over that of 1909—since the Boys' Club entered the field—by more than 200,000,000 bushels!

In agriculture on both sides of the international line, the boy has arrived.—*Farmer's Magazine*, March, 1913. Abridged.

LABOR- SAVING MACHINERY.

The introduction of machinery has revolutionized farm labor and has been of great economic value. Production has been increased and the number of hands decreased. With the latter difficult to get, the advantage is invaluable. There are ploughs and harrows and cultivators on which the farmer sits while driving. The modern reaping machine cuts and binds the harvest crop of grain admirably. The threshing machine makes the grain ready for market as fast as two men can fork the sheaves. Then there are such labor-savers as the mowing machine for hay, a rake for throwing it into continuous windrows, a hay loader, and a machine for unloading the hay into the barn. There is also the wonderful sheaf-loader; the steel frame windmill for pumping water, chopping food for stock, etc.; the Indian-corn shredder; and the swift cream separator. And, finally, electric machinery, the value of which has been demonstrated on a number of farms, and which will rapidly come into use.



Ontario Fruit Exhibit, Canadian National Exhibition.

EXHIBITIONS

The Canadian National Exhibition.*

The exhibits at the Canadian National Exhibition, as its name implies, are practically comprehensive of all the Provinces in the Dominion. Everything can be seen that Canada grows, makes and mines. There are also exhibits from the West Indies, Great Britain and the United States. The Exhibition has an international reputation, drawing thousands of people from the United States each year, special excursions being run from many parts. The attendance in 1912 was just slightly under the million mark. Every year sees additional buildings being erected in order to keep up with the ever-increasing number and variety of exhibits. The Hon. Martin Burrell, Dominion Minister of Agriculture, in a public address, said: "Everybody must recognize the splendid educational work that has been done by the holding of exhibitions and fairs all over the country. One cannot be in a city like Toronto without thinking of the Canadian National Exhibition."

The Western Fair and the Central Canada Fair.

The Western Fair at London and the Central Canada at Ottawa are doing on a smaller scale for the Western and Eastern portions of the Province, respectively, what the Canadian National is carrying out at Toronto. Their displays of live stock, farm produce and manufactures are thoroughly representative of the products of the Province.

The Winter Fairs at Guelph and Ottawa.

The Provincial Winter Fair, held at Guelph in December, and the Eastern Ontario Live Stock and Poultry Show held in Ottawa during January, under the management of the Live Stock Branch of the Department of Agriculture, have a special educational value and are being more largely patronized each year. Lectures and addresses are given by practical men on different subjects relating to live stock, and the judging of carcasses of the animals previously scored when alive creates much interest. The stock exhibits at each of these shows, including horses, sheep, swine, and poultry, are very large.

*The aggregate attendance in 1913 was 1,009,000.



Preparing for the Horse Show.

Horse Shows.

Very important Spring Horse shows are held in Toronto, Ottawa, Galt, and Cobourg each year. That at Toronto extends over four days and a half, and draws large numbers of people from all over the Province. The others are also largely attended. The 1913 Toronto Show surpassed all previous records in total entries, attendance, and receipts. Over 23,000 people were present.

The Horticultural Exhibition.

This is held in the Horticultural building, Exhibition Park. It is an annual show of flowers, fruits and honey, under the auspices of the several societies aided by the Provincial Government, and is organized to promote these attractive industries. A leading newspaper said of the Exhibition held in November, 1912: "The old Horticultural Exhibition was mainly a show of flowers and small fruits, but of recent years the more highly-developed exhibition has for its most impressive feature a vast and varied collection of apples. Canada has become within half a dozen years a great winter apple producing country. It appears to be a law of nature that for the finest grades of any fruit one must go well up toward the northern limit of its production. As in the case of "Manitoba Hard" wheat, so with the spies, russets, and Baldwins; the nearer their place of growth to the limit where they will not mature at all, the better the quality of the fruit for both flavour and persistence. Those who want to have a clear conception of Ontario's potentiality in the way of apple production should make a point of seeing during the present week the finest show of apples ever held in any country."

In 1904, when the Horticultural Association began, there were on exhibit only 11 boxes of fruit and 17 barrels of apples; in 1912 there were 5,000 boxes and 200 barrels. The flower department was magnificent, the display being more brilliant than ever. The collection of vegetables included some huge specimens. A fine tribute was paid the Exhibition by an apiarist of importance from the United States: "I have been forty-eight years in the business, and yet I have got lots of good things out of the meetings held by the apiarists. I am astonished at the advances made in this country." A model rural school in miniature, sent by the Ontario Government, was a charming piece of work, showing in front individual plots for the children, flower beds, and a school farm with fields of various vegetables and grains.



FORESTS.

Three forest regions, south, centre and north, characterize the Province of Ontario. The southern forest has now greatly disappeared, being represented only by farmers' woodlots of from 5 to 20 per cent. of the area. It was largely of very heavy hardwood on the better soils, with an intermixture of white pine on the light soils, and cedar in the swamps, and was by far the richest in number of species of trees.

The central region, embracing the rougher area between the rich agricultural lands on the south and the Ottawa River, is largely occupied by a mixed forest, with white pine as the most widely distributed and most valuable tree; its southern section has considerable areas of birch, maple and beech, with a sprinkling of other valuable hardwoods; and its northern section has the spruce and balsam, which largely displace the hardwoods as companions of the red and white pine. This central forest, white pine predominating, occupies the Ottawa Valley, and extends westward along the north shore of Georgian Bay, and northward near to the Canadian Pacific Rly., and may also include parts of the Rainy River and Lake of the Woods districts, where the intermixed species is chiefly jack or Banksian pine. The great white pine region, with its other species, has been for over fifty years the seat of an extensive lumber industry, which receded from the south.

The northern forest comprises most of the area north of Lake Superior and the entire territory drained by the rivers flowing into James Bay. This is occupied chiefly by the pulp-producing trees. The tree of widest distribution and greatest value is the spruce. Growing with it everywhere in varying quantity are the balsam fir, the birch, the poplar and the Banksian pine. The white and the red pine are sprinkled at the southern border of the pulpwood area, but disappear entirely toward the north. There are no other trees, apart from these few species, of any important quantity. While the southern forests have been almost exterminated, the northern pulplands have been scarcely touched.

Patricia, still farther north, and recently joined to the province, adds fully 100,000 square miles of wooded lands.

An exploration of Ontario north of the Canadian Pacific Rly. was undertaken by the Government in 1900, embracing about 60,000,000 acres. It was found that the territory is covered chiefly by forests of spruce, jack pine and poplar; that the pine region

does not appear to extend much beyond the Height of Land; but that in the country adjacent to Lakes Timagami and Lady Evelyn there is an extensive area of red and white pine of fine quality, besides many smaller areas elsewhere. It was also estimated that the District of Nipissing (now in large part Timiskaming) north of the C.P.R. contained 20,000,000 cords of pulpwood; the then District of Algoma, 100,000,000 cords; the District of Thunder Bay, 150,000,000 cords; the then District of Rainy River, 18,000,000 cords, a grand total of 288,000,000 cords, and it is not unlikely 300,000,000.

The forest area of the province, not counting Patricia, is estimated at 102,000 square miles. The pine forests are the most valuable on the continent of America. The quantity of pine still standing on licensed lands is estimated at 7,000,000,000 feet, and on unlicensed territory, 13,500,000,000. The total area now covered by timber license is 18,410 square miles, of which 12,469 are in the western portion, 5,331 in the region of the Upper Ottawa, and 610 in the Belleville district. The total production of sawlogs in 1912 was 556,961,514 feet board measure, of which 440,186,217 came from the west, 100,151,987 from the Upper Ottawa, and 16,623,310 from the district of Belleville. The average cut of pine for the last two years, 1911-12, was 536,051,385 feet board measure. The output of timber other than pine showed an increase of 24,093,160 feet over last year. There was also an increase in the pulpwood of 49,612 cords. The most notable expansion was in railway ties. The quantity taken out last year was 4,270,832 ties. The quantity taken out this year was 5,704,459 ties, showing an increased output for the year of 1,433,627 ties. The total revenue from woods and forests for timber dues, bonus, ground rent and transfer fees in 1912 was \$1,985,662. Ontario leads in the production of seventeen different kinds of wood, British Columbia in the production of five, and Quebec in four. The total lumber cut in Ontario in 1911 was 1,716,849 feet board measure, valued at \$30,584,724; giving the province the leading place in Canada with 34.9 per cent. of the total cut.

The Government of Ontario has permanently withdrawn from settlement nearly thirteen million acres of crown lands as Forest Reserves. These are: Nipigon, 7,300 square miles; Timagami 6,000; Mississauga, 3,000; Quetico, 1,500; Sibley, 70, a total of 17,870 sq. miles in Northern Ontario; Algonquin Park, 2,060; Rondeau Park, 8; Eastern, 100, a total of 2,168 square miles in Old Ontario, or a grand total for the province of 20,038 square miles. The

greater portion of Algonquin Park is covered by license, which authorizes the cutting of certain classes of timber.

Large pulp and paper industries are established at different points throughout the province, which derive their supplies of raw material from the extensive pulpwood areas belonging to the Crown. These industries are situated at Ottawa, Sturgeon Falls, Espanola, Sault Ste. Marie and Dryden, while similar plants are being constructed at Abitibi and Fort Frances.



Lumbering

FISHERIES.

The Great Lakes are the largest freshwater fisheries in the world. Many lakes and rivers in Northern Ontario are not embraced in the regular industry; they are fished only, and to a small extent, by the white angler, the half-breed, or the Indian. The regular fisheries cover Lakes Superior, Huron, Erie and Ontario, Georgian Bay, Lake of the Woods and Rainy River, Lake St. Clair and River Thames, and certain inland waters chiefly in Old Ontario.

The principal fish taken are herring, in Lakes Erie, Ontario and Superior; trout, in Lakes Huron and Superior, and in Georgian Bay; whitefish, in Lakes Erie, Huron and Ontario, and in Lake of the Woods and Rainy River; pickerel in Lakes Erie and Huron, and in Lake of the Woods and Rainy River; pike, in Lakes Erie and Ontario, and in Lake of the Woods and Rainy River; Sturgeon, in Lake of the Woods and Rainy River, Lake Erie, Lake St. Clair and River Thames. The classes specified are not confined to these waters.

Hudson Bay, part of which is contiguous to Ontario, has an area of 500,000 square miles, Straits excluded, and abounds in fish. The future will see that immense body of water the basis of great fisheries.

Yield and Value of the Fisheries of the Province for the year 1911.

Kinds of Fish.	Quantity.	Price.	Value.
		\$ c.	\$ c.
Whitefish..... bbls....	1,556	10 00	15,560 00
Whitefish..... lbs....	4,143,769	10	414,376 90
Trout..... bbls....	4,713	10 00	47,130 00
Trout..... lbs....	5,569,383	10	556,938 30
Herring..... bbls....	6,644	10 00	66,400 00
Herring..... lbs....	11,953,228	5	597,661 40
Pickrel.....	2,022,495	10	202,349 50
Pike.....	2,098,317	8	167,881 36
Sturgeon.....	225,316	15	33,797 40
Caviare.....	7,082	1 00	7,082 00
Bladders..... No....	589	60	353 40
Eels..... lbs....	145,196	6	8,711 76
Perch.....	1,274,979	5	63,748 95
Catfish.....	651,954	8	52,156 32
Coarse Fish.....	2,806,922	5	140,346 10
Tullibee.....	375,458	6	22,529 48
Carp.....	1,418,517	2	28,370 34
Total.....			2,419,178 21

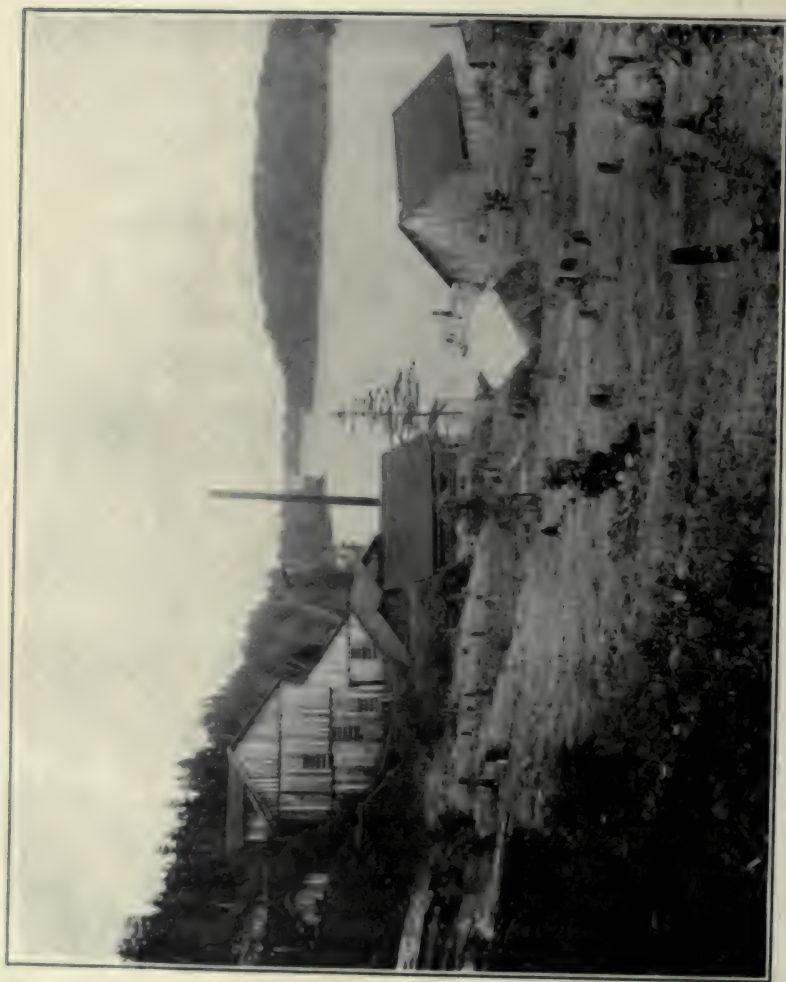
The return in 1910 was \$2,348,269.57. And the total value of Ontario fisheries from 1870 to 1911 inclusive was \$54,007,447.72. In 1911 there were employed 666 men on 156 tugs of 12,074 tonnage, and 2,740 men on 1,578 boats. The total value of fishing apparatus was \$1,258,059.

MINERALS.

The mineral resources of Ontario cover almost the entire list of metallic and non-metallic substances with the exception of coal. The principal metals are silver, nickel, iron, gold, and copper. Several years ago the province assumed the first place among the Dominion provinces in the value of metallic products, and the position is still easily maintained. The total value of the various products in 1912 was \$48,341,612, which shows an advance over 1911 of \$6,364,815, or 14.9 per cent., and over 1907 of 93 per cent. The output five years before (1908) was \$25,637,617, and the increase has been steady. The production of silver in 1912, chiefly by the Cobalt camp, was 30,719,883 ounces or one-seventh of the world's output, while the total product since the beginning in 1904 has amounted to nearly 156 million ounces, with a value of about 82 million dollars. Last year Gowganda and South Lorrain contributed 1,384,095 ounces. Nickel from the mines of Sudbury in 1912 was 70 per cent. of the world's supply. The quantity of iron ore mined in 1912 was less than in 1911 by 58,274 tons. The output of pig iron was greater, being 589,593 as against 526,610 tons. Copper was 11,126 tons, the increase over 1911 being about 24 per cent. For the first time in the history of Ontario there was a substantial production of gold. In 1911 the output had a value of \$42,637; in 1912, of \$2,114,086. The greater part came from the Porcupine district, where the mines came into yield during the year. The St. Anthony mine at Sturgeon Lake, and the Cordova mine in the county of Peterborough, yielded considerable bullion.

In non-metallic construction materials, notably brick and stone, there was an increased output over 1911, due to the brisk building trade in the cities and towns. The beautiful marbles of the Bancroft quarries are being used for decorative purposes, especially in public buildings. The whole production of building materials amounted to \$8,641,369. There is a long list of minor products that constitute the basis of important industries; the raw material is abundant and could easily respond to a much larger demand.

The profits derived from the mineral industry are considerable. Taking the province as a whole, dividends to shareholders in 1912 would approximate 14 to 15 million dollars. They were obtained chiefly from the silver ores of Cobalt and the nickel-copper mines of Sudbury, but were contributed to also by the building materials, oil, natural gas, salt, feldspar, talc and other substances, raised principally in eastern and south-western Ontario.



Gold Mine, Eagle River, Lake of the Woods.

MINERALS

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Mineral Production of Ontario, 1912.

Product	Quantity	Value	Em- ployees	Wages
		\$		\$
Metals:				
Gold	195,378	2,114,000	502	1,802,000
Silver	50,110,000	17,071,810	2,180	2,120,000
Platinum	3,000	80,000		
Palladium	4,000	147,000		
Copper	11,150	1,284,000	2,300	2,200,000
Nickel	25,800	4,700,000		
Cobalt	800	22,500	60	50,000
Iron ore	117,507	208,000	607	500,000
Pig iron	200,000	6,000,000	2,000	500,000
Lead (concentrated)	50	1,000	10	2,000
		24,700,000	11,000	8,120,000
Less Ontario iron ore (11,380 tons) smelted into pig iron		10,000		
Total		24,700,000		
Non-Metals:				
Arsenic (refined)	4,100	101,700		
Brick (common)	250,000,000	2,170,000	2,200	1,000,000
Tile (grain)	10,000,000	970,000		
Brick (paving, fancy, &c.)	8,000,000	210,000		
pressed	65,000,000	604,100	100	100,000
Building and crushed stone		600,000	600	271,000
Calcium carbide	1,000	100,000	40	50,000
Cement, Portland	2,000,000	2,000,000	1,000	670,000
Corundum	1,000	200,000	100	100,000
Feldspar	10,000	20,000	50	20,000
Graphite (refined)	1,000	10,000	50	50,000
Gypsum	51,000	10,000	100	50,000
Iron pyrites	20,000	11,000	100	100,000
Lime	2,000,000	200,000	200	100,000
Mica	500	27,000	70	20,000
Natural Gas		2,000,000	200	100,000
Peat	100	100	10	100
Petroleum	8,000,000	240,000	200	200,000
Putney		25,000	70	70,000
Quartz	80,000	170,000	100	50,000
Salt	50,000	100,000	100	100,000
Sewer pipe		100,000	200	100,000
Talc	4,000	20,000	20	20,000
Total non-metals		11,540,000	4,000	4,100,000
Add metals		24,700,000	11,000	8,120,000
Total production		36,240,000	15,000	12,220,000

(a) Employees and wages included in Cobalt oxide, &c., production.

WATER POWERS.

Canada has an estimated water area of 125,755 square miles, or nearly two and a half times the water area of 52,630 sq. miles possessed by the United States. The water area of the province of Ontario is 40,354 sq. miles, exclusive of any part of the Great Lakes or of any arm of the sea, and this area is over 75 per cent. of the total water area of the United States, apart from external possessions. This is suggestive of immense energy in the province, so far as area goes. But water is not necessarily water-power or its unrestricted availability when existent. Depth of water, descent, still water intervals, rainfall, evaporation, ice, and such interests as navigation and municipal water-supply, have all to be considered in the estimate of available energy. General statements implying that "the aggregate amount of water-power must be great because the total water area, or watershed area, is so great," or "because there are so many lakes and rivers," are, for reasons given by experts, generalities of very little value. One of the chief dangers of such generalities is to create, in the popular mind especially, a feeling of unwarranted assurance that, even though desirable water power rights are being granted by a government, yet there is so much left that no apprehension may be entertained regarding the amount of power rights being parted with. Many people forget that the dissemination of such generalities is too often part of a plan to make easy the acquisition, by interested parties, of the most coveted privileges. It takes years of observation and study to enable experts to furnish approximately reliable data. Hence a government's slow and deliberate action is of deeply significant value.

There is, however, one exceedingly valuable feature very likely to be associated with extensive water areas, and that is the existence of vast natural reservoirs, where the run-off from precipitation is impounded, and subsequently discharged gradually throughout the year. Thus, water-powers situated within the range of the direct influence of such natural storage reservoirs may be of incomparably greater value than other water-powers not so favored. In the matter of easily developed water storage systems, no other large territory on the continent of America is so highly favored as is the Dominion of Canada.

The water powers of Ontario, estimated upon the basis of the minimum horse-power or the mean low-water discharge, are as follows:—

The rivers from the St. Lawrence on the east (the Ottawa and the Niagara excluded) to the Arrow in Thunder Bay on the west	1,544,540
The rivers from the Seine to the English, northern slope	203,838
The rivers from the Albany to the Frederickhouse, James Bay slope	664,817
The Ottawa tributaries	87,920
The Ottawa from Lake Timiskaming to the St. Lawrence, Ontario's share	822,681
The Niagara Falls, Canada's half	1,000,000
The Lower Niagara, Canada's half	450,000
	<hr/>
	4,773,796

Average conditions of flow might increase the power twenty-five per cent., and storage, where possible, fifty per cent.

If either Canada or the United States should first exercise its right to generate 500,000 h.p. from its share of the Niagara waters, then physical conditions might probably prevent the other country from actually developing all told half a million horse-power from the remaining available waters at Niagara Falls.

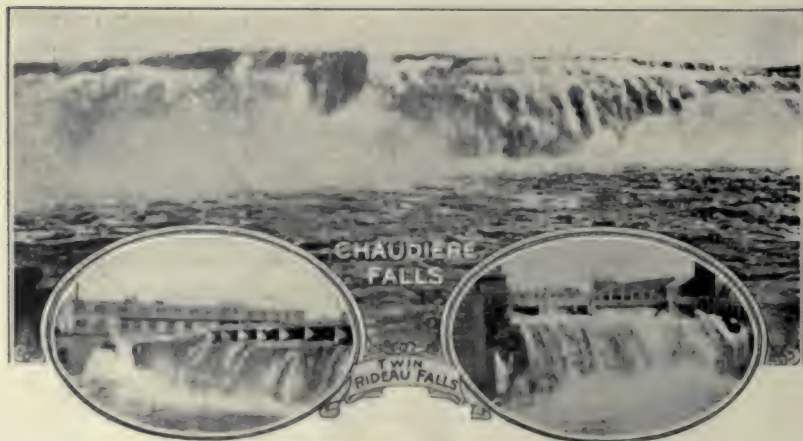
Franchises have already been granted, and plants partially completed, for the development on the Canadian side of the river of about 450,000 h.p. There will probably be an actual development of 250,000 h.p. within the present year (1913).

Water Power Developed in Canada in 1910.

Province.	Electrical Energy.	Paper and Pulp.	Other Industries.	Total.
Ontario (less 40,000 for Quebec)	408,683 H.P.	37,375 H.P.	51,008 H.P.	497,066 H.P.
Quebec	191,842	16,000	31,973	339,815
Nova Scotia	1,423	11,000	1,300	13,723
New Brunswick	5,400	3,654	3,314	12,368
Prince Edward Island	40	.....	400	440
Manitoba	68,200	.....	90	68,290
Saskatchewan .....	.....	45	.....	45
Alberta	2,000	.....	.....	2,000
British Columbia	88,146	8,400	4,154	100,700
Yukon	2,000	.....	.....	2,000

(For the most of the information in this chapter and for valuable detail, see "Water-powers of Canada," issued by the Commission of Conservation, Ottawa.)

Prior to 1898 no statutory regulations had been made by the Ontario Legislature to govern the lease or other disposal of water-powers, *per se*, situated upon lands possessed by the Crown. Nevertheless, the water-powers so granted were by no means free from legal restrictions, nor are they now. On April 19, 1905, Premier Whitney said:—"The water-power at Niagara should be as free as air, and, more than that, I say on behalf of the Government, that the water-powers all over this country shall not in future be made the sport and prey of capitalists, and shall not be treated as anything else but a valuable asset of the people of Ontario." On December 13, 1911, the Hon. Adam Beck said: "Niagara Falls has come back into the possession of the people of the province and we can develop electricity at the falls 75 per cent. cheaper than it could be developed by any means known to man to-day." "The people of the Province of Ontario have appropriated for all time to come one of the greatest assets, one of our wealthiest heritages, when they conserved through this movement the water-powers, 'the white coal mines,' of the Province of Ontario."





Transmission Lines, Paudas Valley, Ontario.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

The Hydro-Electric Power Commission was appointed in May, 1906, by the Provincial Legislature of the Province of Ontario, to undertake the development, generation, transmission and distribution of electrical energy at cost to various municipalities throughout the Province. This action on the part of the Legislature was inspired by representatives of a number of municipalities, the latter desiring to share the benefits which might be derived from the employment of the vast amount of available hydraulic power existing within the confines of the Province.

The necessary capital to finance this scheme was furnished by the Province. The municipalities purchase power at rates which cover the actual cost of power, interest and sinking fund charges on the transmission and distributing system, and operation and maintenance expenses. The project itself will never become a direct tax upon the people or the municipalities which have contracted with the Commission for power. The Government has merely agreed to finance the scheme and receives in return a fair rate of interest on its investment. The entire capital expenditure will eventually be recovered through the sinking fund charges, and after this is returned to the Government the municipalities will nominally own the transmission system.

The Commission has constructed and is at present operating 281 miles of 110,000 volt transmission line and approximately 250 miles of 13,200, 6,600, and 2,200 volt distributing line in the Niagara District, as well as a 22,000 volt transmission line supplying the municipalities of Midland and Penetanguishene and known as the Severn System. The Cities of Ottawa and Port Arthur are also supplied with energy by the Commission, while a transmission line between Morrisburg and Prescott, to be known as the St. Lawrence System, is at present under construction. The Niagara System (the first constructed) comprises 12 high tension transforming stations and 39 municipal low tension transforming stations. Additional transmitting and distributing lines are to be constructed as soon as the necessary contracts have been made. Additions will also be made to the other lines.

The project has been successful since its inception, and the Commission, as the Municipal Trustees of this provincial transmitting and distributing system, is now supplying energy at cost to between thirty and forty municipalities in different parts of the Province at rates varying from \$15.00 to \$50.00 per h.p. per year.



Electric Light, Yonge Street, Toronto.

The total cost of the transmission lines of the Niagara System to the end of the fiscal year, October 31st, 1912, is \$2,798,218.71, which with the transforming and distributing stations makes a total capital expenditure in this district of \$4,158,829.24. The total capital investment for all other systems at the end of the same fiscal year is \$421,000.70.

"Never before," said the Hon. Adam Beck, at the Guelph Winter Fair, "has a line been built or works been constructed and equipped such as we have equipped in the Province of Ontario. We began on a solid foundation. Three corporations develop power at Niagara Falls and there was no necessity for further development. After eighteen months' negotiations we are able to offer to-day electricity at \$9.00 per horse-power, Niagara Falls, and we have 100,000 horse-power available." This is about one-fifth of the cost that it can be generated for from coal, and is cheaper than power had ever been sold in the world, as between a company and a corporation, or a company and a Government. The saving per year in Ottawa is \$270,000; Toronto, over \$500,000; Hamilton, from \$200,000 to \$300,000; and in London, \$150,000. "If you take the thirty different municipalities that we are supplying, I am safe in saying that the \$4,000,000 invested by the Province, with \$4,000,000 or \$5,000,000 invested by the municipalities, has saved the users of power \$2,000,000 per annum—or say \$10,000,000 in five years. This power is sold to the people at cost price, and it means power not only to the cities but to the villages and to many of the farmers of the Province of Ontario, and I could not begin to tell you the great benefit it is going to be. What can you do with power on the farm? You may cook; you may heat; operate all the machinery on the farm, whether a plow, a harrow, a reaper, a mower, or the modest cream separator, the washing machine, the iron, the sewing machine; you may light up your farm, or do the milking." At a convention of the Women's Institutes the Hon. Mr. Beck said: "Farm labor is expensive and scarce, and that makes farm life more burdensome. When labor is scarce and expensive, anything that takes its place is a help to the farmer, and we must encourage the farmer, because agriculture takes the first place in the Province of Ontario."

In the recent bill (1913) for the benefit of farmers, "respecting the public construction and operation of electric railways," the chief feature is the elimination of two important factors of cost, the heavy charges for underwriting and the high cost of power. There will be no stock jobbing or dividend-paying sections.

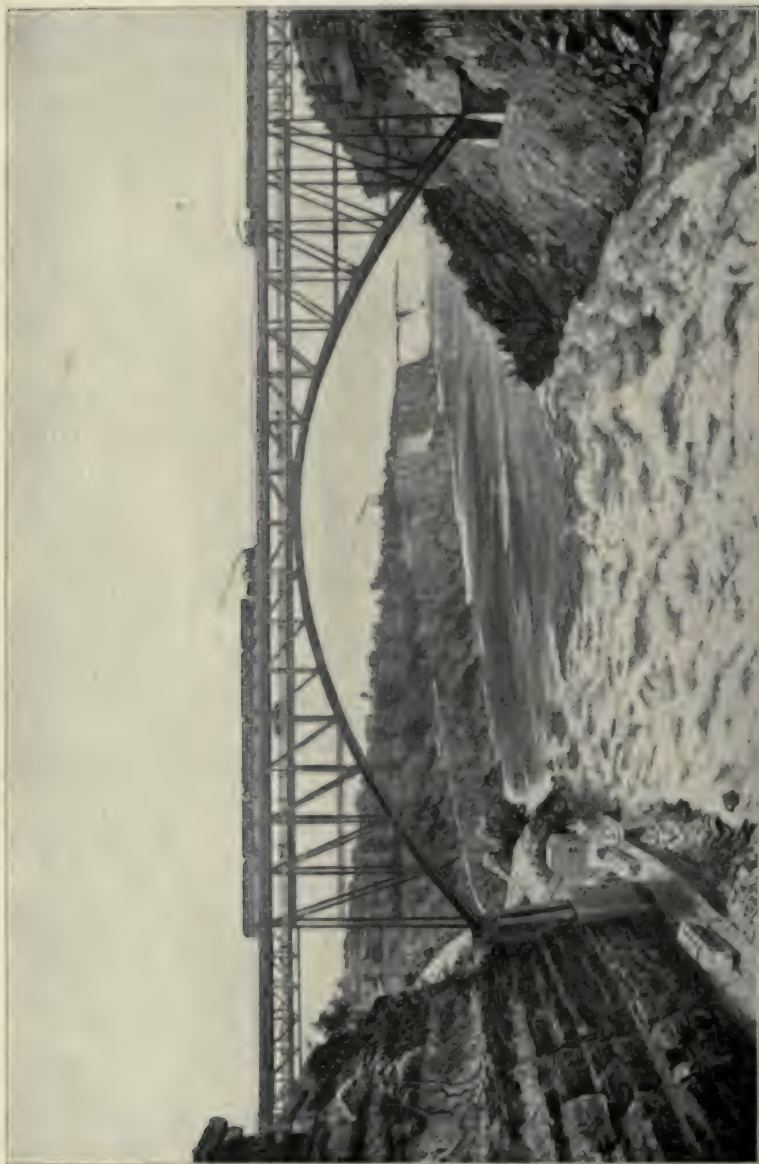
TRANSPORTATION.

Transportation is the greatest problem in Canada to-day. The Dominion Government will give attention to the great inland system of navigation, the deepening of waters, the provision of terminal facilities and the improvement of harbors on the Atlantic and Pacific coasts. Canadian railway traffic shows a record gain during the year ending June 30, 1912. The number of passengers carried was 41,124,181, being an increase of 4,026,463 over 1911. The number of tons of freight handled was 89,444,331, an increase of 9,560,049. The gross earnings totalled \$219,403,753, a gain of \$30,670,259. And in ten years these earnings have more than doubled.

Railway transportation in Ontario can best be understood, first, by reference to the leading systems operating in the Dominion at large, and, second, by greater detail of their operations within the Province itself. These systems are four in number, the Grand Trunk, the National Transcontinental, the Canadian Pacific and the Canadian Northern.

THE GRAND TRUNK RAILWAY SYSTEM.

The principal eastern termini of this system are at the City of Montreal and the City of Quebec on the St. Lawrence River, and at Portland on the Atlantic seaboard in the State of Maine. From Quebec the road runs along the south shore of the St. Lawrence River, which it crosses by the Victoria Jubilee Bridge at Montreal. After leaving Montreal the line enters the Province of Ontario and continues westerly through the thickly settled country along the north shore of the St. Lawrence and Lake Ontario to Toronto, 333 miles from Montreal. At Toronto lines diverge to the west and south through the fertile Niagara district to Niagara Falls and across the Niagara River by the single arch double track steel bridge, thence to Buffalo in the State of New York, and through the south-western portion of the Province to Windsor and Detroit. West and north from Toronto lines run to the lake ports of Sarnia, Goderich, Kincardine and Southampton on Lake Huron, and to Wiarton, Owen Sound, Meaford, Collingwood, Penetanguishene, Midland and Depot Harbour (Parry Sound) on the Georgian Bay, and through the famous "Highlands of Ontario" to North Bay, where a junction is made with the Canadian Pacific transcontinental line and the Timiskaming and Northern Ontario Railway. At Sarnia the main line of



G.T.R. Steel Arch Bridge over Niagara River.

the railway passes through the St. Clair tunnel to Port Huron, and thence to Chicago. From Montreal a line extends to Ottawa on the Ontario side of the Ottawa River, and from thence to Depot Harbor on Georgian Bay, a distance of 380 miles; another from Belleville and Port Hope on Lake Ontario to Midland on the Georgian Bay. Besides these lines there are numerous local branches which act as feeders, extending into nearly every section of the older portion of the Province.

In all, 3,000 miles out of the Company's 4,639 miles of railway are in the Province of Ontario, 650 miles of which is double main track extending from the easterly boundary of the Province, westerly via Toronto, Niagara Falls, Hamilton and London to Windsor and Sarnia. It has in all 1,019 miles of double track, making it the longest continuous double track railway in the world under one management.

Prior to 1898, the Grand Trunk did not handle any grain from Lakes Superior and Michigan through the Georgian Bay and St. Clair River ports for export via Montreal, but since that time it has done a large and increasing share of the business. As an illustration of the importance of the Canadian Northwest grain trade, the shipments of wheat from Port Arthur and Fort William on Lake Superior in Canadian vessels in 1912 aggregated nearly 54,000,000 bushels, the Grand Trunk carrying in connection with their elevators at Collingwood, Midland, Goderich, Point Edward, Tiffin, Meaford, Depot Harbor and Port Huron, over 20,500,000 bushels, or 39 per cent. of the total.

Some of the fastest long distance trains in the world are operated over the Grand Trunk, and a special service of limited passenger trains is operated between the Atlantic Ocean and Chicago. During 1912 the system, including the G.T.P., carried nearly sixteen million passengers, and over twenty-four million tons of freight.

THE GRAND TRUNK PACIFIC RAILWAY.

The Grand Trunk Pacific Railway Company was incorporated October 24th, 1903, for the purpose of providing Canada with a National Transcontinental Railway from the Atlantic to the Pacific Ocean entirely within Canadian territory, and when completed it will therefore form the only "All-Canadian Route." It will also form the Pacific extension of the Grand Trunk Railway System and it is projected with the joint support of the Grand Trunk Railway Company of Canada and the Canadian Government. The main line of

what is termed the Eastern Division from Winnipeg to Moncton, N.B., estimated at 1,800 miles, is being constructed at the cost of the Government, and when finished will be leased to the Grand Trunk Pacific Company for 50 years. The entire main line from Moncton, N.B., to Prince Rupert, B.C., embraces an approximate mileage of 3,600 miles, and the projected branches,—all of which both of the Eastern and Western Divisions will be built by the Grand Trunk Pacific Company,—aggregate 4,400 miles, making a total projected mileage of main line and branches of 8,000 miles, which embraces a line to Dawson in the Yukon territory. About 3,100 miles of track has been laid on the main line and there still remains a section in B.C. of about 400 miles to be completed when the entire railway will be connected between the Atlantic and Pacific. About 1,000 miles of branch lines have been constructed to date. In Ontario the line will pass through the Great Clay Belt from east to west, and assist materially in developing an immense area of agricultural land at present inaccessible. It includes amongst its branches in the Province a line of 195 miles from the main line southward to Port William and Port Arthur; also a line from the main line southward 229 miles to North Bay.

THE CANADIAN PACIFIC RAILWAY.

This great railway company, which was incorporated in 1881, has now nearly 17,000 miles of completed road. With its steamship and rail systems its service reaches from Liverpool to Hong-Kong—more than half way around the globe. The C.P.R. is something more than a mere transportation company. Besides its steamships on the Atlantic and Pacific oceans, on the Upper Lakes and on the coast and inland waters of British Columbia, the Company operates a chain of hotels extending from New Brunswick to British Columbia, owns its own telegraph and express services and its own system of sleeping, parlor and dining cars, and has vast irrigation works in the west, coal mines in the Rockies and smelters in the mining regions of Southern British Columbia. It is also the holder of millions of acres of fertile lands in Manitoba, Saskatchewan and Alberta.

The lines of the Canadian Pacific Company extend from St. John, New Brunswick, an ocean port on the Atlantic, and from the city of Quebec to Montreal, and after leaving the latter city the main transcontinental line continues up the valley of the Ottawa River as far as Mattawa, where a branch extends northward to Lakes Timiskaming and Kipawa. From Mattawa it turns westward

and crosses the entire Province of Ontario north of the great lakes, continuing on through Manitoba and the western Provinces to Vancouver on the Pacific, a total distance from St. John of 3,380 miles. From Sudbury, in the Sudbury District, there is a branch line 179 miles long, which runs along the north shore of the Georgian Bay to Sault Ste. Marie, where connection is made with railways in the United States.

In Ontario its lines include the following: the Ontario and Eastern Divisions, Montreal to Toronto, 338 miles; Ottawa to



C.P.R. Offices, Toronto, 237 ft. high, the highest office building in the Empire.

Prescott, 52 miles; Ottawa to Brockville, 74 miles; Toronto to Windsor and Detroit, 230 miles; Toronto to Owen Sound, 121 miles, with the Walkerton, Wingham, Teeswater and Elora subdivisions; the Guelph and Goderich branch, 88 miles, with the Listowel subdivision; the Kingston and Pembroke, 104 miles, and there are branches which lead to Bobcaygeon, St. Mary's, St. Thomas, Port Burwell, etc. The line from Toronto to Sudbury makes easy of access the Muskoka lakes and the 30,000 islands of Georgian Bay, the line traversing the very heart of this picturesque region.

The newly constructed line between Port McNicoll and Bethany Junction, which is on the main line near Peterboro, now provides a short route between east and west *via* the Great Lakes; and a new line between Hamilton and Guelph Junction links Guelph, Galt and Goderich closer to Hamilton than heretofore.

In Western Canada the Company is building branches in many directions, and in British Columbia its lines are being extended.

The net earnings of the railway are rapidly growing. Ten years ago they amounted to \$15,836,845.78; last year they were nearly \$43,500,000, and this total will be largely exceeded in the fiscal year now closing.

While the head offices of the Company are at Montreal, Toronto is an important centre from which radiate lines to different points in the Province of Ontario. At present a new line is being built from Toronto to Montreal following the shore of Lake Ontario.

THE CANADIAN NORTHERN SYSTEM.

This system has grown within the last sixteen years from 101 miles to fully 7,000 miles of railway. It owns its own steamships, hotels and express and telegraph services.

The component parts of the system at the present time are: The Canadian Northern Railway from Port Arthur to Winnipeg and through the West, serving all points of importance in Manitoba, Saskatchewan, and Alberta, and the Canadian Northern Pacific through the Yellowhead Pass to Port Mann and Vancouver; the Canadian Northern Ontario Railway in the Province of Ontario; the Canadian Northern Quebec Railway in the Province of Quebec, with charter rights in the Province of New Brunswick, and the Quebec and Lake St. John Railway; and the Halifax and South Western Railway in the Province of Nova Scotia.

With the completion of the line now building from Montreal through Ottawa and North Bay, the Sudbury-Port Arthur line, and the gap from Yellowhead Pass to the Pacific coast, which is expected in 1914, it will extend from coast to coast. And with the opening of the Great Clay Belt, through the southern portion of which the line between Sudbury and Port Arthur runs, some of the finest agricultural land in Canada will be thrown open for settlement. The railway enters the Clay Belt proper after crossing the Kapuskasing, where all the country is fit for settlement, and is covered with a splendid spruce forest which will provide profitable work for the settler during the winter time, as there will be a ready market for pulp wood at the various pulp mills which will follow the opening

of the railway. The North Lake branch of the railway has made accessible the Slate River and Pigeon River valleys, where there is land of high quality which, being close to the cities of Port Arthur and Fort William, has an excellent market for its produce. The Central Ontario, a C.N. subsidiary, and the C.N.O.R. serve Prince Edward County, a rich agricultural section and noted for its apples and small fruits. With these railways the Trent Valley Canal, and the Great Lakes the county has ideal transportation facilities.

The Canadian Northern is in the Trans-Atlantic trade with two Royal Mail steamers, magnificently equipped, which give fortnightly service between Montreal, Quebec and Bristol during the season of St. Lawrence navigation and between Bristol and Halifax in the winter months.

THE TIMISKAMING AND NORTHERN ONTARIO RAILWAY.

This railway is owned by the Province of Ontario and is managed by a Commission. It starts at North Bay, where connection is made with the Grand Trunk, the Canadian Pacific and the Canadian Northern Railways from south, east and west. The main line extends northerly, 253 miles through the famous Timagami sportsman's region, the great Cobalt silver camp, and a section (partly cultivated) of the fertile clay belt, to Cochrane, where it connects with the National Transcontinental Railway (Grand Trunk Pacific), which forms the new route from the Atlantic to the Pacific: Halifax to Prince Rupert. The branch lines of the T. & N. O. R. are: Cobalt to Kerr Lake, (3 miles), penetrating the heart of the silver country; Earleton to Elk Lake, (29 miles), through 21 miles of richest clay lands, and the highway to the Gowganda silver camps; Englehart to Charlton, (8 miles), the Long Lake country, a fertile agricultural district; Iroquois Falls to Timmins, (34 miles), to the famous Porcupine gold mines fields, and through 25 miles of rich agricultural lands. Iroquois Falls is also the junction point for a branch line (7 miles) now under construction to the plant of the Abitibi Pulp and Paper Co., 45,000 horse-power, with local market for pulpwood.

In 1905, first year of operation, the T. & N. O. Railway carried 86,648 passengers, 99,192 tons freight, and the gross revenue was \$253,720.55. In 1912, it carried 497,452 passengers, 562,734 tons freight, and the gross revenue was \$1,707,450.07. From 1905 to June 1913, 3,672,407 passengers have been carried without loss of life by accident.

THE ALGOMA CENTRAL AND HUDSON BAY RAILWAY.

The railway is now completed between Sault Ste. Marie, Franz, and Michipicoten Harbour, and is operating a regular passenger, freight and express service between those points. There is also a freight service in operation between Franz and Oba, and the road is being rapidly pushed to completion as far as Hearst on the National Transcontinental Railway. The passenger service between Franz and Hearst will not be ready till after midsummer, 1913, but construction trains will be available for reaching the lands to be settled.



Along the A. C. and H. B. Railway.

The distance from Sault Ste. Marie to Franz is 195 miles, to Oba 245, to Hearst 295, and from Michipicoten Harbour (end of branch line) to Hearst is 160.

The railway company is opening for settlement some 300,000 acres of farm lands adjacent to the line in the fertile Clay Belt of New Ontario. The surface is generally level or slightly rolling, like the prairie, except that the land is wooded, well watered, and much of it drained by numerous streams.

ELECTRIC RAILWAYS

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THE MICHIGAN CENTRAL RAILWAY.

This is an important line which, crossing from the United States at Niagara Falls and Fort Erie, runs southwestward for 265 miles to Windsor through the rich fruit belt of southern Ontario.

The total length of each railway or system of railways actually operating within the Province is as follows:

Grand Trunk and branches	3,079 miles.
Canadian Pacific and branches.....	2,087 "
Canadian Northern and branches.....	1,131 "
National Transcontinental and branches....	947 "
Timiskaming and Northern Ontario Railway and branches	316 "
Algoma Central and Hudson Bay Railway and branches	267 "
All other systems	1,312 "

Included in this were 605 miles of new railways opened for traffic in 1912. The Province leads the other Provinces in railway mileage with a total of 10,039 miles.

ELECTRIC RAILWAYS.

Electric railways are in many of the cities and leading towns of the Province. Radial lines extend from the chief cities into the country, and there are also rural lines affording subsidiary transportation for passengers, light freight and farm produce. The total length is 772 miles.

HIGHWAYS IN SOUTHERN ONTARIO.

It is estimated that in the organized counties of Old or Southern Ontario, there are 50,000 miles of roads classified approximately as follows:

Trunk roads connecting the large towns and cities	2,500 miles
County or leading market roads	6,000 miles
Main township roads	25,000 miles
Secondary township roads	16,500 miles
Total	50,000 miles

The highways previous to the construction of steam railways, about sixty years ago, were the only means of transportation from the ports reached by navigation on the Great Lakes. It was abso-

lutely necessary, therefore, that they should be the best obtainable and that they should be maintained in the best possible condition. To build and maintain highways costs more money than the ordinary citizen realizes; the municipal or provincial authorities had not funds available to cope with this large undertaking. The work was taken up by enterprising private citizens who formed road companies with authority to build and maintain roads and collect the cost by toll from the parties using the roads. In this way good gravel, stone or plank roads forming trunk and leading market highways were provided.

Steam and electric railways now furnish transportation facilities to every section of Old Ontario, and few places can be found that are twenty miles from a railway station.

The highways in southern Ontario are under the control of the the local municipalities. The municipal corporations of cities, towns and villages control their public streets, while those of the townships control the ordinary county roads. County Councils are given power under the Highway Improvement Act to assume the control of the main or leading roads in the county. Some few toll roads are still in existence under private control.

City streets are generally well paved, the cost being provided by a special tax on the property benefited.

The ordinary country roads were until recently constructed and maintained by statute labour, the owners of the abutting lands being compelled by statute to perform each year a certain number of days' labour according to the value of their property. Many townships have given up this method and provided for the cost of road work by a general tax. The outlay for twenty years by the townships of Ontario on ordinary country roads was estimated by the Provincial Commissioner of Highways at 22,000,000 days of statute labour and \$19,015,103 cash expenditure, or allowing statute labour at one dollar per day the expenditure on this class of roads in twenty years exceeded in value \$40,000,000.

The expenditure on county roads under the Highway Improvement Act in eighteen counties during the year 1912 was about \$870,876.04. The total expenditure on county roads from the passing of the Highways Improvement Act in 1901 to 1912 has amounted to about \$4,273,478.05, of which the Province of Ontario paid one-third and the counties two-thirds.

Notwithstanding the above large sums expended on the roads, it cannot be claimed that they are good roads. The introduction of the motor car and motor truck has brought the problem of im-

proved highways so persistently before the business men, the manufacturers and other classes living in our towns and cities that the demand for good roads has become one of the foremost questions of the present day, and it is receiving the attention of both Provincial and Federal Governments.

COLONIZATION ROADS.

Under the \$5,000,000 appropriation for Northern Ontario, which is administered by the Northern Development Branch of the Department of Lands, Forests and Mines, the total number of miles of road cut out or improved during the season of 1912 was 233, of which 210 miles were entirely new. The expenditure was \$308,446. The appropriation for 1913 is \$1,000,000. There are 2,800 men at work this year. (For detailed information on colonization roads, see the Provincial Government handbook, *Northern Ontario, 1912*.)

Under the Colonization Roads Branch of the Department of Public Works the total number of miles of road built and improved in 1912 was 2,083, and the total expenditure was \$566,884. The operations of this Branch are confined to the more sparsely settled sections of older Ontario, and they extend throughout the whole area of New or Northern Ontario. Over 5,000 men were at work in 1912.

There are 10,000 miles of what may be termed colonization roads.

WATERWAYS.

Ontario has a magnificent system of inland waterways in the form of the Great Lakes and rivers, the chief of which is the River St. Lawrence, the outlet of the mighty volume into the Atlantic Ocean. From Port Arthur on Lake Superior, to tidewater on the St. Lawrence at Quebec, the distance is about 1,400 miles. This chain of waterways gives to the Province maritime advantages in cheap transportation.

Lakes.

Lake.	Length—miles.	Average breadth—miles.	Area—sq. miles.	Surface of water—sq. miles—(ft. 100)	Depth of water—feet.
Superior.....	420	80	21,600	600	1,200
Huron.....	270	70	21,200	500	1,000
Michigan.....	250	60	21,200	480	700
St. Clair.....	35	15	465	170	16
Erie.....	210	30	10,000	170	200
Ontario.....	180	15	7,000	260	600

Other important lakes in the Province are: Abitibi, 356 square miles; Eagle, 127; La Croix, 23; Lake of the Woods, 1,851; Mille Lacs, 104; Muskoka, 54; Nipigon, 1,730; Nipissing, 330; Rainy, 324; Rice, 27; Sandy, 300; Seugog, 39; Seul, 392; Simcoe, 300; St. Joseph, 245; Timagami, 91; Timiskaming, 117; Trout, 300; and others.

The chief ports on the Canadian side of Lake Superior are Fort William and Port Arthur, where millions of bushels of wheat are shipped from the prairie provinces of the Northwest; on the main part of Lake Huron—Goderich, Kincardine, and Southampton; on Georgian Bay—Wiarton, Owen Sound, Collingwood, Midland, and Depot Harbor; on Lake Erie—Port Colborne, Port Dover, Port Stanley, and Rondeau; and on Lake Ontario—Niagara, Port Dalhousie, Hamilton, Toronto, Whitby, Port Hope, Cobourg, Belleville, Picton, and Kingston.

The total number of sailing ships and steamers of the lakes and rivers of Ontario as on the Dominion Register, Dec. 31, 1911, was 2,014; number of steamers, 1,472; gross tonnage of steamers, 255,628; total net tonnage of sailing ships and steamers, 236,877.

Canals.

The canals along the route of the Great Lakes and the St. Lawrence River between Port Arthur and Montreal are: the Sault Ste. Marie Canal, $1\frac{1}{4}$ miles long; the Welland Canal, $26\frac{3}{4}$ miles, connecting Lakes Erie and Ontario; and the St. Lawrence Canals, $45\frac{1}{2}$ miles long, making $73\frac{1}{2}$ miles in all. The complete waterway distance between these two cities is $1,223\frac{1}{2}$ miles.

Two other canal systems are: (1) the Rideau River system, from Kingston to Ottawa, and (2) the Trent Valley system, from Lake Ontario at Trenton through the Kawartha Lakes to Georgian Bay.

The Murray Canal, 5 1-6 miles long, divides Prince Edward County from the mainland and gives a southwest entrance into the Bay of Quinte.



Sixty great lake freighters from Port Arthur and Fort William passing carrying 14,000,000 bushels of grain.

through Canal to Saint John, Maine.

Vessel and Freight Tonnage passed through the Sault Ste. Marie Canal.

Years.	Canadian vessels.		U.S. Vessels.		Total No.	Vessel Tonnage.	Freight Tonnage.		
	No.	Tonnage.	No.	Tonnage.			Canadian.	United States.	Total.
1908.....	3,289	2,603,232	2,204	7,035,655	5,293	9,638,887	2,092,231	10,606,985	12,759,216
1909.....	2,597	2,988,936	3,734	14,850,738	6,331	17,839,674	3,369,495	24,494,750	27,861,245
1910.....	2,744	3,173,494	5,226	20,187,704	7,972	23,361,198	3,345,619	33,050,038	36,395,657
1911.....	2,713	3,108,880	,068	16,252,340	6,781	19,361,220	3,177,581	27,774,128	30,951,709
1912.....	2,643	3,296,229	5,213	22,536,015	7,856	25,832,244	4,090,362	35,579,293	39,669,655

The large and growing difference between the traffic of Canada and the traffic of the United States through the canals of Canada, arises almost wholly at Sault Ste. Marie. For example, in 1912 the proportion of strictly Canadian traffic which passed through the Canadian canal at Sault Ste. Marie was 10.3, and the traffic of that canal represented 83 per cent. of the total canalage for the whole Dominion. Of the American traffic which passed through the Canadian canal that year iron ore constituted over 87 per cent. In other words, out of 35,579,293 tons of American traffic at Sault Ste. Marie, 31,141,063 tons were made up of iron ore.

The situation changes at the Welland. In 1912, out of a total of 2,851,915 tons, Canadian traffic aggregated 1,553,116 tons, or 54 per cent. The St. Lawrence canals for that year showed 2,340,143 tons of Canadian business, out of a total of 3,477,188, or 67 per cent.

The volume of Canadian wheat brought down through the Canadian canal at Sault Ste. Marie in 1911 was 63,641,000 bushels, and in 1912, 83,743,034. But without reference to which of the two canals, Canadian or American, was used at Sault Ste. Marie, the final total of Canadian waterborne wheat in 1912 was 123,986,931 bushels.

MANUFACTURES.

As a field for the profitable investment of capital, Canada has few equals and no superiors, and in no branch of her varied industrial development are the opportunities greater than in manufacturing. The factors contributing to the expansion of this market point clearly to a continuity of development for years to come. In immigration alone the population is increasing at the rate of over 400,000 every twelve months. To house, clothe, feed and equip so many extra customers each year would of itself require regular and substantial additions to the output of Canadian factories. But when one considers the enormous amount of construction work of every kind that is steadily going forward,—including the building of railways, canals and colonization roads, the improvement of waterways, the erection of costly public buildings, the installation of waterworks systems, the development of transmission systems, and the numerous other avenues for the consumption of materials,—and also recalls the fact that, besides ministering to the wants of her own people, Canada is being more heavily drawn upon year by year to supply the requirements of other countries in such lines as lumber, fish, flour, dairy produce, meats, paper, etc., it must be admitted that the enthusiasm and confidence with which Canadians are accustomed to look to the future is amply justified.

Ontario is easily the banner province of the Dominion so far as manufacturing is concerned. All the western towns and cities, with nearly all the villages, and all the eastern cities and large towns are engaged in some kind of manufacturing. The imports and exports, domestic and foreign, of the Province during the fiscal year ended March 31, 1913, were as follows: Imports, dutiable, \$183,571,681; free, \$118,079,647; total \$301,651,328. Exports, domestic, \$125,254,179; foreign, \$7,502,353; total, \$132,756,532. The following table of comparison, taken from Bulletin No. 1, Fifth Census of Canada, shows very clearly where this Province stands in relation to the other provinces, and also shows the progress it has made in the ten year period from 1900 to 1910.

Provinces.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Value of products.
1900	No.	\$	No.	\$	\$
Canada.....	14,650	446,916,487	339,173	113,249,350	481,053,375
Alberta and Saskatchewan.....	105	1,689,870	1,168	465,703	1,964,987
British Columbia.....	392	22,901,892	11,454	5,456,538	19,447,778
Manitoba.....	324	7,639,691	5,219	2,419,549	12,927,439
New Brunswick.....	919	20,741,170	22,158	5,718,990	20,972,470
Nova Scotia.....	1,188	34,586,416	25,284	5,613,571	23,692,513
Ontario.....	6,543	214,972,375	101,757	56,548,286	241,532,486
P.E. Island.....	344	2,081,766	3,804	445,998	2,326,708
Quebec.....	4,845	112,403,407	110,329	36,550,655	158,287,994
1910	No.	\$	No.	\$	\$
Canada.....	19,218	1,247,563,609	515,203	241,008,416	1,165,975,639
Alberta.....	290	29,518,346	6,380	4,365,661	18,788,836
British Columbia.....	651	124,097,521	33,412	17,240,070	65,204,235
Manitoba.....	639	47,941,540	17,325	10,912,866	53,673,609
New Brunswick.....	1,158	36,125,012	24,755	8,314,212	35,422,502
Nova Scotia.....	1,480	79,596,341	28,795	10,628,955	52,706,184
Ontario.....	8,001	595,394,098	298,817	117,645,784	579,810,225
P.E. Island.....	442	2,013,365	3,702	551,077	3,136,470
Quebec.....	6,584	326,946,925	158,207	69,432,967	359,901,656
Saskatchewan.....	173	7,019,951	3,350	1,896,284	6,332,132

That the progress and expansion of Ontario's manufacturing industries, as evidenced by the above figures, has been widespread in its application, benefitting all parts of the Province, may be gathered from the next table which shows the share enjoyed by every municipality having in 1911 a population of 10,000 or more.

Municipal cities and towns.	Population 1911	Value of products	
		1909	1910
		\$	\$
Toronto.....	376,538	58,415,498	154,306,948
Ottawa.....	87,701	7,638,688	20,924,731
Hamilton.....	81,969	17,122,346	55,125,946
London.....	46,300	8,122,185	16,273,999
Brantford.....	23,132	5,564,695	15,869,229
Kingston.....	18,874	2,945,173	3,860,142
Peterborough.....	18,360	3,789,164	10,622,119
Windsor.....	17,829	1,260,947	3,771,706
Port William.....	16,499	111,507	594,697
Berlin.....	15,196	3,307,513	9,266,188
Guelph.....	15,175	3,689,183	7,392,336
St. Thomas.....	14,664	2,248,846	3,573,820
Syratford.....	12,946	1,935,176	5,133,840
Owen Sound.....	12,558	1,173,477	2,852,267
St. Catharines.....	12,484	2,070,543	6,024,217
Port Arthur.....	11,220	105,000	973,668
Sault Ste. Marie.....	10,984	738,472	1,002,534
Chatham.....	10,770	2,714,977	5,025,560
Galt.....	10,299	2,225,343	5,252,600

A Prime Factor in Trade.

One of the prime factors contributing to Ontario's pre-eminence in the manufacturing field is the richness and variety of its endowment in natural resources and the splendid use to which it has put these resources in promoting its own development. The only real handicap has been a lack of coal, which had to be imported from the United States under a duty of 53c. per ton. Through the enterprise of the Provincial Government, however, this problem has now been solved in a manner that bids fair to place the Province almost beyond the reach of competition; for by means of a system of transmission lines, under the management of a Commission, electrical energy from the Falls of Niagara and other suitable water powers, energy is being distributed to municipalities at prices heretofore unknown in Ontario. Although it is only two years since the Commission has been in a position to deliver power, it is already serving about forty different municipalities with 50,000 horse power, and the business is steadily increasing.

The availability of cheap power in units of any size has acted as a tremendous stimulus to all kinds of industrial activity, and has given special encouragement to the manufacturer of limited means. This fact, combined with other natural advantages already referred to, accounts in a large measure for the diversity of Ontario's factory products. With the exception of a few highly specialized lines, every kind of article that is made elsewhere in Canada is made also in Ontario, while certain trades seem to be scarcely known in Canada outside of Ontario.

A few brief comments on the classes of manufacturing that stand out most prominently in the industrial life of the province may prove of interest.

Iron and Steel.

Furnaces for the production of pig iron using both Canadian and imported ores are located at Sault Ste. Marie, Hamilton, Midland and Port Arthur. At the first two of these places and at Welland, the further process of converting into steel is carried on. Toronto has a furnace for converting ore into steel castings. For a number of years the production of iron and steel from Canadian ores was subsidized by the Dominion Government, but since 1911 no bounties have been paid. American capitalists have recently begun the erection of a \$20,000,000 steel plant at Ojibway, near Windsor, and a smaller one is nearing completion at Port Colborne.



Carriage Works, Oshawa, largest in Canada.



Railway Yards, Toronto.

Agricultural Implements.

In agricultural implements, Ontario factories have 95 per cent. of the production for the entire Dominion. Toronto, Hamilton, Brantford, Smith's Falls and Ingersoll are the principal centres of this industry, which includes in its varied output ploughs, harrows, drills, cultivators, mowers, rakes, reapers, binders, threshers, fanning mills and in short everything that a well-equipped Canadian farm requires.

The growth of this business has been particularly rapid, due in part to the enormous increase in the demand for implements from the Canadian West, but perhaps even more so to the success which manufacturers here have met with in marketing their product abroad.

Carriages and Waggon.

Carriage and waggon building forms an allied line that runs into very large figures as regards pay-roll and output. Unlike the implement trade, however, the tendency to centralize in a few large establishments is not so apparent, and thriving industries are to be found all the way from Alexandria in the east to Chatham in the west. Ontario has some of the largest carriage manufactories in the British Empire.

Motor Vehicles.

The motor car business is one that has attained substantial proportions in a comparatively short time. In 1900 there was no such thing as a Canadian built motor car; in 1910 Canada turned out over \$6,000,000 worth of motor cars, all of them in Ontario. Some plants still do little more than assemble parts that are imported from the United States and England; others manufacture practically the entire car.

The Engineering Industry.

In all branches of the engineering trades, Ontario is well to the front, her equipment enabling her to turn out locomotives, traction engines, marine and stationery engines and boilers, motors, dynamos and other electrical apparatus, mining, milling and woodworking machinery, machine tools, etc., all comparable with the best that the world produces. The electrical works in Peterboro and Hamilton are the largest of their kind in Canada. Kingston and Toronto are the centres for locomotive building, while for the manufacture of

machinery and machine tools places like Dundas, Galt, Brantford and Preston have attained considerable prominence. Steel ship-building is becoming an important industry in Collingwood, Port Arthur and Toronto.

Heating Apparatus.

Stoves and heating apparatus form another big line that is manufactured in all parts of the province. From the small gas cooker to the largest hotel range, and from the old style box stove to the modern furnace with hot water radiators, Ontario manufactures all and has a surplus every year for export.

Pulp and Paper.

The enormous areas of spruce and balsam in Northern Ontario interspersed as they are with navigable rivers and frequent water powers constitute the basis of a pulp and paper industry that is steadily growing in importance. Every year witnesses some addition to the producing capacity of Ontario's numerous plants which, in addition to pulp and news paper, are making a varied line of high class book and coated papers. An increasingly large percentage of the former product is finding a market in the United States.

Furniture.

Lumbering is of course one of the great basic industries, but Ontario has not stopped there, for in the further manufacture of wood into articles of commerce the province has made rapid strides. In church, school, office and household furniture it is practically supreme so far as the Canadian market is concerned. The industry radiates from the thrifty German settlement in Waterloo County as a centre, thinning out rapidly east and west of that point. In the cheaper lines, as well as in office and bentwood furniture, Ontario does a large export business.

Pianos.

Pianos are another product of which the province is justly proud, and in which it predominates. Quality rather than quantity seems to have been the aim of the manufacturers in this line, and there are at least six makes that have fully as high an average in finish and in tonal effect as anything on the continent.



G.T.P. Elevator. Flour Mills.

Fort William.

Foodstuffs.

In the matter of foodstuffs, Ontario's equipment is varied and highly specialized. The province operates scores of flour mills, one or two with a daily capacity of 9,000 barrels. Bakeries, biscuit factories and factories for the making of breakfast foods are in evidence everywhere and carry the manufacturing process along to a more advanced stage. Another group of industries turn out a wide assortment of canned, preserved and evaporated fruits and vegetables, with pickles and flavoring extracts as important side lines. In still another group are the huge abattoirs, whose packing house products are exported in large quantities to the United Kingdom. Cheese from Ontario dairies is virtually standard the world over, while creamery butter holds a high place. Condensed milk and cream are also deserving of mention in this connection. Of the three beet sugar factories in Canada two are in Ontario. The confectionery trade too has advanced to a point where imports are rapidly falling off.

Textiles.

The knitting industry has been particularly progressive, some of the factories in Galt, Paris, Dunnville, Hamilton, Toronto and Kingston being models of their kind. Carpets of excellent quality are made in Guelph, Hamilton, Toronto and Peterboro. In cottons, Ontario is backward compared with Quebec, though there are three large factories in Hamilton, and one in Kingston. What little linen is manufactured in Canada is all made in Ontario, the principal mill being in Guelph.

Leather.

The leather industries constitute another important group, all departments of which are well represented in the province, including tanning, boot and shoe making, harness making, belting and general leather goods. The output of tanned, curried and finished leather for the census year was nearly \$15,000,000 and of boots and shoes over \$9,000,000. The rubber industry—shoes, coats, hose, tires—is also important, involving millions of dollars in plant and machinery.

Other manufactures which have attained prominence but of which nothing more than passing mention may be made, are aerated waters, bedding, brick, cement, clothing, cooperage, cordage, drugs and chemicals, furs, glass, hardware, jewellery, liquors, organs, paints and varnishes, silverware, soap, tile-pipe, tobacco, wall papers, watch cases, and wire fencing.

BANKING.

The Canadian banking system provides the province with the best of facilities for the transaction of business. All the banks are chartered by the Dominion Government, so that instead of having numerous small banks distributed throughout the country, each of which is dependent on the prosperity of its own locality for stability and strength, under the Canadian system the banking institutions are permitted to operate from their head offices, located in the largest commercial centres, any number of branches which the management and directors deem necessary to serve the interests of the country and show an operating profit. There are 25 chartered banks doing business in Canada, all of which, with few exceptions, have branches in Ontario, and probably every town or village of 600 people is supplied with one bank, sometimes two. Out of a total of 2,889 branches of chartered banks in Canada 1,102 are in this province. Eight chartered banks have their head offices in Toronto, where there are over 160 branch banks and where nearly every bank in Canada is represented. That the Canadian banks are as strong as any in the world will be seen from the following statement, as at January 31st, 1913:—

Total paid up capital	\$ 115,327,032
Total reserves	107,200,548
Total deposits in Canada	1,022,161,434
Total assets	1,485,457,458

Note holders and depositors are secured by the large capital and reserve of each bank, and by the liability of each shareholder for double the par value of shares owned.

Currency.

The decimal system of currency is used, the unit of value being the cent, one hundred of which make a dollar.

The Canadian branch of the Royal mint produces gold, silver and copper coins. The gold coins are minted in 5 and 10 dollar pieces. The English sovereign and half sovereign and the United States 2½, 5, 10, and 20 dollar gold pieces are also current. The silver coins are minted in denominations of 5, 10, 25, and 50 cents, which correspond practically to the British threepenny, sixpenny, shilling, and two shilling pieces respectively. There is only one copper coin, the one cent piece, about equal to a halfpenny, a few of which and the penny are also in circulation.

The change-making notes, that is, the one, two, and five dollar bills, are issued by the Dominion Government. Chartered banks can only issue denominations of \$5 and multiples thereof. The following notes are in general use:—

		Value in Sterling money at the Par of Exchange (9¼% premium).		
		£	s.	d.
— One dollar	\$1.00	4	1	¼
Two dollars	2.00	8	2	¾
Four "	4.00	16	5	¼
Five "	5.00	1	0	6½
Ten "	10.00	2	1	1¼

The approximate value of British coins in Canadian currency at the par of exchange (9½% premium) is as follows:—

£1	\$4.86
10 shillings	\$2.43
1 Crown	\$1.21
1 Florin . . . . .	.48
1 Shilling . . . . .	.24

If the immigrant will keep in mind that one pound sterling is nearly the same value as five dollars (\$5), and one shilling about the same as a quarter (25 cents), he will get at Canadian money values quickly.



Bank of Toronto, Toronto.

EDUCATION.

The standard of education in the province is high. There is a complete system of elementary and secondary schools. The whole scheme of education includes the kindergarten, the public school, the secondary school—high and continuation—and the university. Recently, day and evening industrial, technical, and art schools have been established in various urban centres.

The work of education, elementary and secondary, is under the supervision of the Provincial Department of Education, the Superintendent of Education, and an Advisory Council composed of the Superintendent and nineteen elective members representing the University of Toronto, Queen's University, McMaster University, Ottawa University, and the Western University. School Teachers—Public, High, and Separate—Public School Inspectors, and the School Trustees.

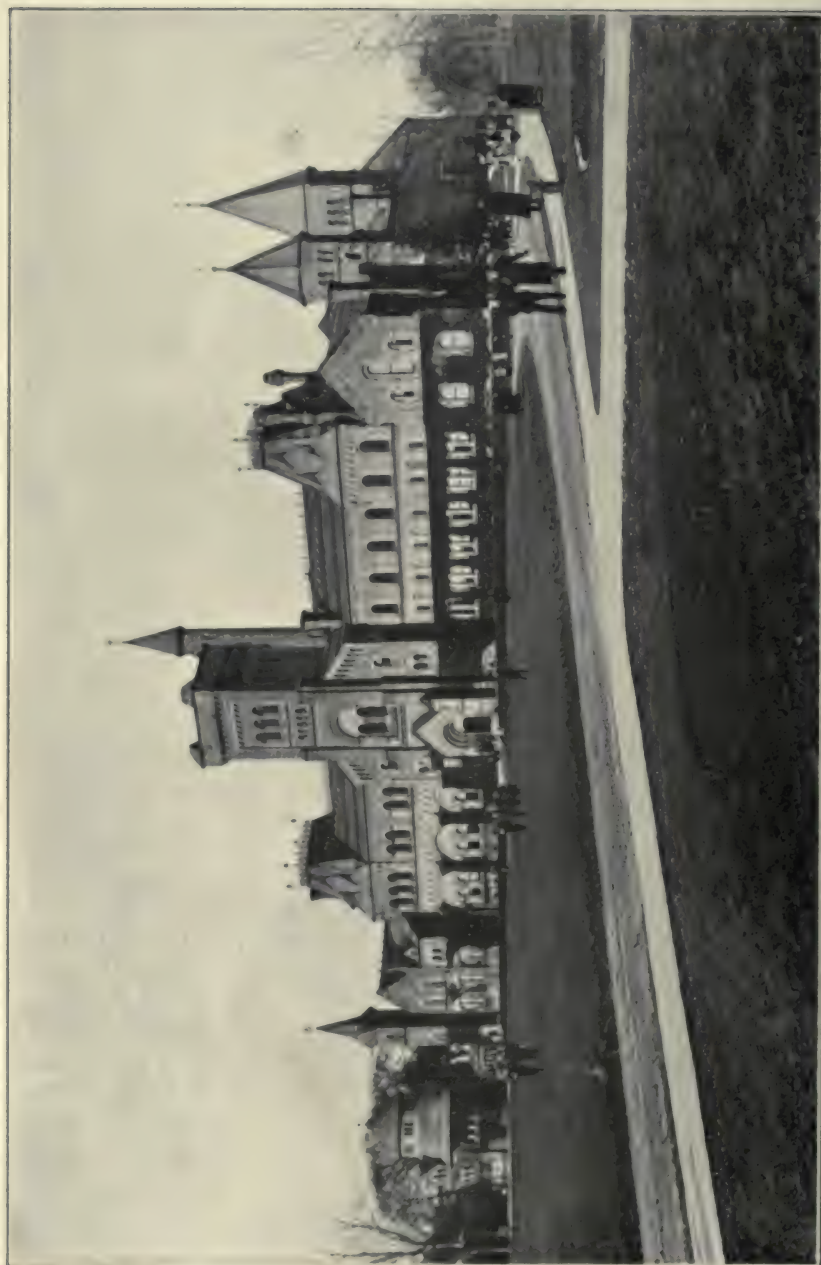
Ontario is divided into counties and districts, which are subdivided into townships and the latter into school sections. In each section there is a public school controlled by trustees elected by the local ratepayers.

The public schools are unsectarian. Attendance is compulsory and education is free. There are no class differences, the sons of the poor having the same advantage as those of the rich and the same avenue to the highest distinctions of the university itself.

The Province is mainly Protestant, but Roman Catholics have been accorded the right to establish separate schools for secular and religious instruction, and other religious denominations may establish Protestant separate schools under certain conditions.

A high or a continuation school is in every city, in every town or village of importance, and in a number of townships. Tuition is free, or a fee charged that is nominal. These institutions form the connecting link between the public schools and the university and are open to students that have successfully completed the earlier course of elementary instruction.

The number of public schools in 1911 was 5,921; pupils enrolled, 400,552; average daily attendance, 244,674; Roman Catholic separate schools, 495; pupils enrolled, 50,396; average daily attendance, 37,310; Protestant separate schools, 6 (included in public schools); pupils enrolled, 424; average daily attendance, 260; kindergarten, 194; pupils enrolled, 20,677; average daily attendance, 7,591; night public schools, 21; pupils enrolled, 1,573; average attendance, 351; night high schools, 2; pupils enrolled, 77, average attendance, 34;



continuation schools, 129; pupils enrolled, 5,753; average attendance, 3,487; high schools (including 44 collegiate institutes), 148; pupils enrolled, 32,227; average daily attendance, 20,177. Total enrolment, 520,255. The total population of the province in 1911, 2,523,358, and the percentage enrolled, 20.61. The number of teachers in all schools, 12,016; inspectors, 110. The average cost per pupil, enrolled attendance, \$23.26. The total amount expended on public schools in 1911, \$9,006,394; R. C. separate schools, \$867,800; high schools, \$1,948,058; continuation schools, \$252,080.

There are Normal schools in Toronto, Ottawa, London, Hamilton, Peterborough, Stratford and North Bay. They have been increased by the present Government from 3 to 7 to meet the demand for well qualified teachers for the public schools.

The faculties of education at the University of Toronto, and Queen's University, Kingston, train teachers for the high schools and first-class teachers for the public schools.

The province has several excellent universities, the principal one being the University of Toronto, which was founded in 1827, and is supported by provincial funds. It has assets of fully \$5,500,000 and an income of over \$800,000. It is undenominational. The number of students enrolled in the session of 1912-13 was 4,197. A large proportion is drawn from the intelligent, agricultural population of the province. The *Globe* says:—"It is the people's chief educational institution. It is the main source of those streams of scientific knowledge and intellectual culture which flow through the secondary and primary schools, and enrich and vitalize the life of the province. No one who knows the University and its work is called on to make apology for it. It stands in the front rank not only in America but in the British Empire. Its graduates are among the foremost scholars and workers in every centre of culture and research, and professional service. Its professoriate, man for man, in ability and teaching power and personal influence easily measure up to the best standards of the greatest universities. Never in the past was the university as vital as now. Never did its professors and students, over four thousand strong, count for so much in the life of Canada. Sir James Whitney in his whole public career has done nothing else more creditable to himself or more worthy of his Premiership than his work, personal and official, in making possible the rapid development of the Provincial University. His colleagues in the Cabinet and their associates on both sides in the Legislature are neither obscurantist nor reactionary. Their place is the place of leadership. They will, we are confident, strongly lead and rightly interpret public opinion in providing such



Public Library, Victoria University, Public Schools, Toronto.

revenues for the great university of the people that Ontario's own leadership in the arts and crafts and industries, and in the more delicate science of life itself, will be worthy of the premier province of this new nation."

The London Daily Mail, England, says:—"In the mass Canadian university men appear to be better educated than English university men, because their education is more closely in touch with life. They have almost always more desire to learn and a more vivid interest in life. They are more in earnest about it."

Federated with the University of Toronto are Victoria University, Trinity University, Knox College, Wycliffe College, and St. Michael's College.

Affiliated with it are Albert College, Ontario Agricultural College, Ontario Medical College for Women, Royal College of Dental Surgeons, Toronto College of Music, Ontario College of Pharmacy, Toronto Conservatory of Music, Hamilton Conservatory of Music, Western Canada College of Calgary, Columbia Methodist College, Ontario Veterinary College and others.

Besides the University of Toronto, the other undenominational universities are Queen's University, Kingston, and the Western University, London.

The denominational universities are:—Victoria (Methodist), Toronto; Trinity (Episcopalian), Toronto; Ottawa (Roman Catholic), Ottawa, and McMaster (Baptist), Toronto.

The Ontario College of Art, one school of dairying and two schools of mining receive Government aid.

Endowed schools and colleges, some of them denominational, are in various places throughout the province. Among them are:—Upper Canada College, and St. Andrew's College, both residential schools for boys.

The teaching of agriculture in the rural schools is promoted by means of school gardening and the issuing of agricultural education bulletins, and is meeting with success. Over 100 schools in 1912 qualified for grants under this heading to the amount of \$4,500.

The extension of agricultural training in connection with high and continuation schools is also making progress. So far 27 centres have been formed, where a teacher holding the degree of B.S.A. is a member of the staff and also county representative of the Department of Agriculture with duties associated with field work among the farmers. A grant equivalent to the salary of one of these actual teachers is given to the High School Board by the Department of Education.

Public libraries are in all the cities of the province, in nearly all the towns and villages and in many of the townships.

Total grants for all public, high, continuation, separate, technical and industrial school purposes..... \$1,147,256

Total grant for University of Toronto 472,697

Total grant for agricultural education 687,503

Grand total expended by the Provincial Government for educational purposes, including the above..... 3,208,652



School Gardening.

HEALTH, PROTECTION, RECREATION.

PUBLIC HEALTH IN ONTARIO.

This subject is under control of the Provincial Board of Health comprising seven members. The Secretary is the executive officer and is known as the Chief Officer of Health. There is a Provincial Inspector and under his control seven District Officers of Health and a Sanitary Inspector. All of these officers devote their whole time to the work of public health.

The Provincial Board has control of all sanitary measures, including public water supplies and sewage disposal. None of these utilities can be established without the Board's approval, and by recent enactment the Board has mandatory powers where municipalities neglect these works.

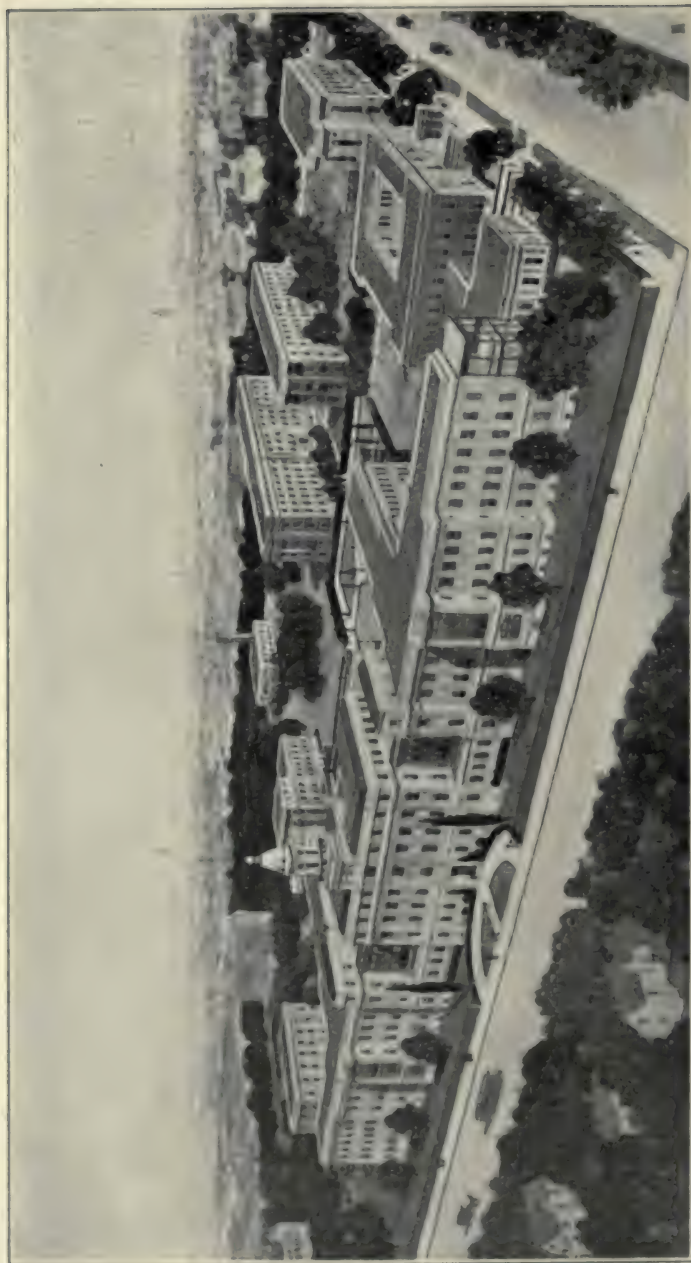
The Board has power to make and enforce Regulations respecting any public health matter. At the present time Regulations are in force respecting the control of the various communicable diseases, in respect to quarantine, inspection of meat, burials and disinterment of the dead, tuberculosis (which is required to be notified), lumber, mining and railway construction camps, sewage disposal in summer resorts, the supply of pure drinking water in public places, sanitary precautions in summer resorts and upon boats, etc., etc.

The care of Public Health in Ontario is regarded as being thoroughly advanced.

HOSPITALS AND PUBLIC CHARITIES.

Ontario provides for the sick and suffering. There are 86 public hospitals throughout the Province all under Government inspection. In addition to these there are 10 hospitals for the insane, where all suffering from any form of mental disease receive hospital care and attention. Probably no other country in the world has adopted such progressive measures for the care, treatment and protection of the sick, the defective and the delinquent.

The new General Hospital, Toronto, opened in June, 1913, is one of the world's finest institutions. It has accommodation for 670 beds, over 700 if necessary, and provides for an increased daily capacity of 400 in the outpatient's department. The cost of the building and equipment is about \$3,500,000.



New General Hospital, Toronto, covering 10½ acres.

The Institutions of the National Sanitarium Association and allied Institutions of the Toronto Free Hospital for Consumptives are:—(1) the Muskoka Cottage Sanatorium, and (2) the Muskoka Free Hospital, at Muskoka; (3) the Toronto Free Hospital, (4) the King Edward Sanatorium, and (5) the Queen Mary Hospital for Children, at Weston. As devoted wholly to tuberculosis the first and second are pioneer Canadian institutions, the third is the first hospital in the world for purely advanced cases, and the fifth is the first separate hospital for children. Their total accommodation at present is 630 beds. There is paid out annually for maintenance \$300,000.

Regarding Reformatories, a Commission from the United States, after investigating the Central Prison Farm at Guelph, said:—“Ontario has spoken the last word in prison reformatory methods, at least so far as we have yet met, and we have been on the work for some time. The working of the institution and the results are a revelation.” A new and perhaps more ambitious scheme is the Central Prison Farm of 600 acres near Fort William. Here the men, not criminals, but ordinary first offenders, have hewed and cleared their way into the forest, and they prefer this work to mowing lawns in jail yards. They give the Province a better return than if they were held behind brick walls, and the Province gives the men a better chance to start right in social life again.

PROTECTION OF CHILDREN.

If the test of a country's civilization is to be found in the treatment accorded its children, then Canada, and more particularly the Province of Ontario, is entitled to a high place on the roll of nations. Over twenty years ago the Ontario Legislature enacted a Children's Charter that has since been copied by all the other Provinces, by many of the adjoining States and, in some of its important features, by Great Britain and foreign countries. In fact it paved the way for the large and ever-increasing interest now being taken in social and child-welfare. Children's Aid Societies are organized in the various cities and counties. Over ten thousand children have been placed in foster homes in the past twenty years, and in addition to the direct benefit conferred on the children, the public funds have been saved to the extent of at least one million dollars in the lessened expense for the maintenance of this class. The chief objects of the Society are: the betterment of children in their own homes; their removal when necessary to ensure a chance of becoming good citizens; an endeavor to assist every child to receive fair treat-



In Lake Ontario.

ment, wholesome surroundings and good moral influences; the finding of eligible foster homes for all children made wards of the Society; careful supervision without undue interference after being placed in foster homes; receiving and inquiring into complaints of neglect or ill treatment of children.

FACTORY INSPECTION.

During the past year there were over 9,000 inspections and other visits in 403 cities, towns, villages and hamlets of the province, besides investigations of accidents. Only a few cases of child labour were found, and in every case the law was enforced.

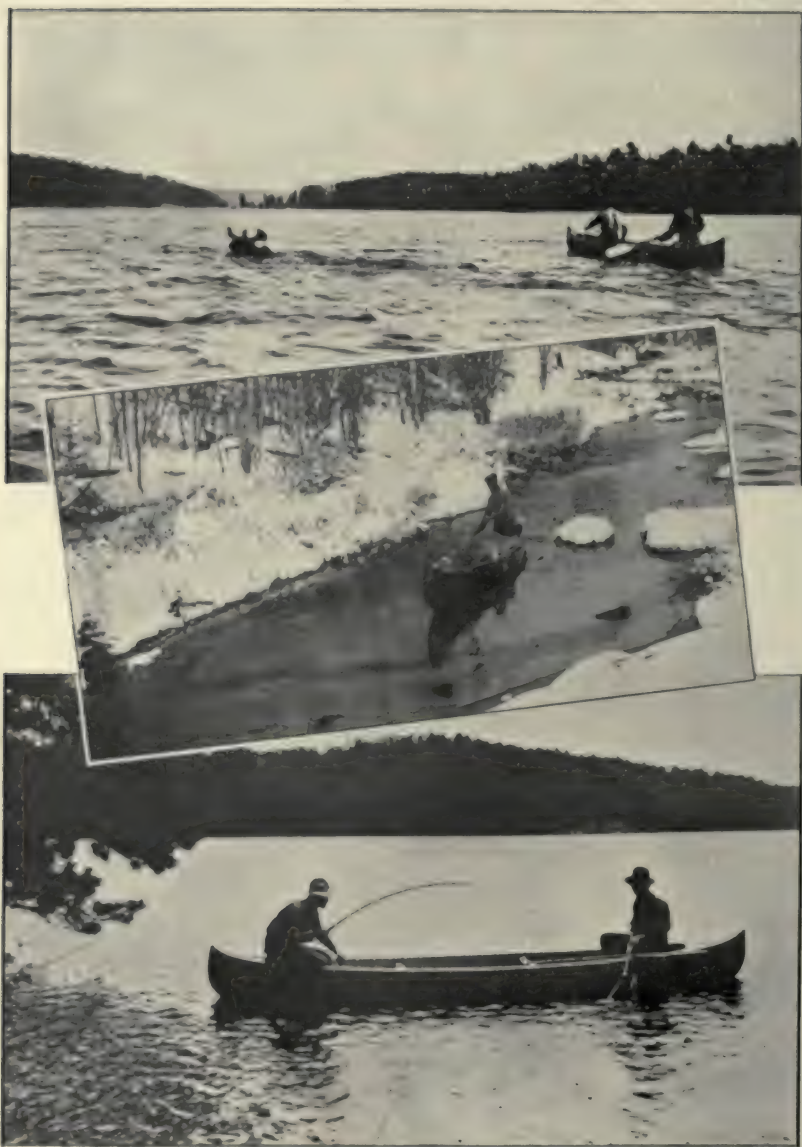
The use of electricity as a motive power is being rapidly adopted. Probably 25 per cent. more of the factories, especially the larger ones, have used it within the last few years.

SUMMER RESORTS.

In natural beauty and variety, Ontario is replete with attractions. The magnificent playgrounds of the "Highlands of Ontario" are filled during the summer season with tens of thousands of people from all over the American continent. The city of Toronto is the objective point for nearly all of these attractive resorts, chief among which are the Kawartha Lakes, Lake Couchiching, Muskoka Lakes and the 30,000 islands of Georgian Bay, Lake of Bays, Magnetawan River, Lake Nipissing, the French and Pickering Rivers, Bala Falls, Algonquin National Park, and the Timagami and Timiskaming regions of Northern Ontario. Then there is in the northeast the delightful scenery of the Rideau River and the River St. Lawrence, and in the south the world famous Niagara Falls. The Grand Trunk, the Canadian Pacific, the Canadian Northern, and the Timiskaming and Northern Ontario Railways and steamboat companies give excellent service. There are many other near and far distant picturesque parts which, like the above, could not get justice in brief space. The following editorial deals with the subject attractively:—

Ontario for a Holiday.

People who are thinking of their holidays just now should not overlook Ontario. It is a reproach to the people of the Province that they know so little of the beauties of their own division of the British Empire. People who come from all over the world to see Niagara are astonished to find that most of it belongs to Ontario, and that Ontario has created one of the most beautiful parks in the world around the great cataract. But they are far



Chasing a Moose (C.N.R.). Canoeing Home a Deer. Hooked (C.N.R.).

more surprised to learn that thousands of people in Toronto have never seen the Falls.

Ontario, however, has many remarkable scenes as well as Niagara. Four of the five great lakes are associated with Ontario, and along their coasts, especially perhaps in the Georgian Bay region, and in the 1,000 Islands and stretches of the St. Lawrence River, Ontario has a wonderful birthright. Inland there are other and as bewildering scenes of beauty. Muskoka is the resort during the summer of hordes of United States visitors, but there are districts much nearer Toronto which afford the most charming sylvan and rural landscapes. Victoria County and the Rice Lake and Stony Lake territory for sport and holidaying are unrivalled, and then away up in Hastings and Renfrew Counties are to be found scenes as strange as almost anywhere on the continent, outside the mountain ranges. The Ottawa River is an outlet for many tourists, canoeists and others who go up into Algonquin Park, and beyond this, north and west, are the marvels of Nipissing and Timagami and Timiskaming, while the trip up the Montreal River is one never to be forgotten. All of these places are not outside convenient range, while westward lies Nipigon, and beyond that the wonders of the Rainy River country. The poets have confined themselves chiefly to the lakes, but these wider fields must soon attract literary attention. The novelists have a boundless store before them in these endless millions of acres.

Before the recent accession of territory Ontario was just the same size as the German Empire. It is now more than half as large again. A more fertile land does not exist on earth. The forests of Ontario have paid the people's taxes for some generations, and the forestry department hopes to maintain the record. Water power exists in abundance. The only thing that is scarce is people. If Ontario people would make haste to get acquainted with Ontario, all over its 400,000 square miles, they would soon have the rest of the world spending their vacation here, and finally settling down in residence. Then would be fulfilled the saying, uttered twenty years ago by a *World* man, that the centre of the British Empire shall yet move over to Canada.—*World*, June 18, 1913.

HUNTING AND FISHING.

This is a most alluring field. Forests of vast extent, rivers and lakes innumerable, game and fish abundant, in a province $3\frac{1}{2}$ times the size of the Old Land, with only $2\frac{1}{2}$ millions of people, and just about a week's sail from British shores. Think of it. How grand the opportunity! Thrilling pleasure to the sportsman. Enjoyment and sustenance to the settler. More than that. It is not limited to men of the strong, adventurous type. It is within the reach of the ordinary man. For magnificent railways penetrate these fastnesses in Old and New Ontario: the Grand Trunk, the Canadian Pacific, the Canadian Northern, and the National Transcontinental, spreading-out and speeding-out with comfort and ease for thousands of miles. The "Highlands" and other parts of Old Ontario are at their command, with multitudes of deer; great numbers of duck; and plentiful shoals of fish: black bass, brook trout, maskinonge (30 lbs. weight) and others of the finny tribe. So also are Timagami and Timiskaming (by T. & N. O. R.) on the east, and

right through the great Districts of Northern Ontario to Rainy River and Kenora on the west, where hunter and angler find the lordly moose, caribou, red deer, hare and beaver; black bear, grey wolf, lynx and porcupine; wild goose, wild duck, grouse, partridge, prairie chicken and ptarmigan; sturgeon, maskinonge, salmon trout, speckled trout, white fish, herring, pike and bass. Thousands of sportsmen enter that area of strength and pleasure every year.



Mary Lake, G.T.R.

GOVERNMENT.

CANADA.

The Dominion of Canada, of which Ontario is one of the federated provinces, is a federal dependency of Great Britain, and has a representative and responsible government, with the seat of Government at Ottawa, in the Province of Ontario.

Federal Executive.

The King is represented by a Governor-General, advised by a Cabinet chosen from the members of the two Houses of Parliament. The Cabinet consists of 15 ministers holding departmental offices, besides one or more ministers without office.

Legislative Power.

The principles of parliamentary government are those of the British Isles. The legislative power is vested in the King, the Senate and the House of Commons. The Senate comprises 86 members appointed by the Crown. It has co-ordinate powers of legislation with the House of Commons, except in fiscal matters. The House of Commons consists of 219 members, elected every five years (unless Parliament is sooner dissolved) by the citizens of the various Provinces. Parliament meets regularly once a year; members of both Houses receive a salary. The legislative powers of the Federal Government are limited to certain subjects of Dominion or National importance set forth in the written constitution entitled "The British North America Act."

Province of Ontario

LIEUTENANT-GOVERNOR His Honor, J. M. Gibson, K.C., LL.D.

EXECUTIVE COUNCIL.

<i>President of Council and Prime Minister</i>	Hon. Sir J. P. Whitney.
<i>Attorney-General</i>	Hon. J. J. Foy.
<i>Treasurer of the Province</i>	Hon. I. B. Lucas.
<i>Secretary and Registrar of Province</i>	Hon. W. J. Hanna.
<i>Minister of Education</i>	Hon. R. A. Pyne.
<i>Minister of Agriculture</i>	Hon. I. S. Duff.
<i>Minister of Public Works</i>	Hon. J. O. Reaume.
<i>Minister of Lands, Forests and Mines</i>	Hon. W. H. Hearst.
<i>Without Portfolio</i>	{ Hon. J. S. Hendrie
	{ Hon. A. Beck.

The executive power of the Province is vested in a Lieutenant-Governor, appointed by the Governor-General of the Dominion-in-Council and aided by a Council, the members of which have seats in the Legislative Assembly, to which they are responsible. The seat of Government is at Toronto.

There is only one House, an elected Assembly, consisting of 106 salaried members. The duration of the Assembly is four years, unless sooner dissolved. There is manhood suffrage, limited by residence and citizenship. The sessions are annual. The powers of the Legislature are defined by the British North America Act. The subjects that fall within the legislative authority of the Provincial Government are very numerous: comfort and convenience, liberty and life, all the rights of citizens with respect to property, and the endless matters that daily affect a community.

The legislative powers of the Province relate to the management and sale of public lands and the timber and minerals thereon; administration of justice in the Province; property, and the raising of revenue for provincial purposes; the establishment, maintenance and management of prisons, hospitals, asylums, charities, education, etc.; tavern licenses, local works and undertakings, and generally all matters of a local nature.

The revenue of the Province is derived from the sale of Crown lands, timber and minerals, from liquor licenses, succession duties, and other fees, supplemented by a subsidy from the Dominion. The total revenue of the Department of Lands, Forests and Mines in 1912 was \$2,900,204.74. The Province expends a great deal of money in public services such as are maintained elsewhere wholly by the municipalities. These include the care of lunatics, the maintenance of institutions for the deaf, dumb and blind, of reformatories and refuges. Aid is given to hospitals and charities, and the Province undertakes the care and protection of neglected children, and further aids the municipalities with large grants for Public and High Schools.

Statement of leading items of Expenditure by the Province of Ontario for the year ended October 31, 1912:

Civil Government	\$680,451 95
Legislation	281,426 73
Administration of Justice	674,390 79
Education	1,963,251 64
Public Institutions Maintenance	1,313,969 48
Agriculture	687,503 04
Colonization and Immigration	106,227 63

Hospitals and Charities	411,108	88
Public Buildings, Maintenance, etc.....	1,617,068	94
Public Works	203,823	20
Colonization Roads	433,623	22
Miscellaneous Services	1,140,590	10
Charges on Crown Lands	579,862	19

For the year 1912, the total receipts amounted to \$13,822,756.34, and the total expenditure to \$13,887,604.45. On the 31st day of October of that year, the Province had cash to the amount of \$1,439,071.88 on deposit to its credit in the bank.

Municipal Government.

Ontario possesses a very complete system of municipal government. The municipal divisions are counties, cities, towns, villages and townships. The ratepayers of each municipality annually elect a council to transact its business, these councils being entrusted with certain quasi-legislative powers. Revenue is provided by taxation. The only direct taxes that the people of Ontario are called upon to pay are imposed by the municipality, and they are as a rule quite moderate, especially in rural municipalities. In the latter, taxes may be levied for roads and bridges, for schools, and for general administrative purposes, etc. Urban municipalities may, in addition, raise funds for the establishment of water and sewerage systems, and for the acquisition and operation of public utilities, by-laws having first been submitted to the ratepayers and their endorsement obtained. As a rule where large sums are to be expended, debentures are issued by the municipality and taxes levied to meet the outlay.

In most countries the expenses of the central government are met by taxes levied on the municipalities, but in Ontario this is not the case. The municipalities raise no funds for the central government, but, on the contrary, the central or provincial government distributes large sums each year among the municipalities.

A Municipal District is a division of Ontario in which, owing to sparseness of population, there is no County Council, and the duties of the Council are therefore discharged by the Government of the province.



Toronto Harbour.—The work planned for the improvement of the waterfront and the creation of a 14-mile lakefront boulevard and driveway calls for an expenditure estimated at \$19,142,088.

POPULATION.

The Province of Ontario has a population of 2,523,274, principally British or of British origin. It is obvious that there is room in Ontario for many millions more, and people of British stock, able-bodied and industrious, are particularly welcome.

CITIES AND TOWNS.

Ontario has approximately 300 cities, towns and villages. It has the honor of possessing the capital city of Canada. The following are the cities and the more important towns:—

IN OLD ONTARIO.

Toronto.

Toronto is the capital of Ontario and the seat of the Provincial Government. The second city in the Dominion, it is one of the most beautiful on the continent. It is situated on the north shore of Lake Ontario, on a slope of land gradually rising from the shore to a height of 220 feet, and it covers an area of 33 square miles. In front of the city is the harbor, a square mile in area, formed by an island on the south. On the east is the River Don, and on the west the Humber. The city possesses many tree-shaded streets, fine parks, elegant residences, and handsome public buildings, such as the Legislative Buildings, the City Hall, the General Hospital, and the Public Library.

It is the seat of a number of educational institutions—the University of Toronto, with affiliated colleges: University College, Victoria, Trinity, Knox, Wycliffe, St. Michael's; McMaster University; Royal College of Dental Surgeons; Upper Canada College; St. Andrew's College; a Normal School; Colleges for Ladies; Colleges of Music, and others.

Its industries are many and varied, including the manufacture of engines, boilers, mining and other machinery, agricultural implements, heating apparatus, carriages, motor vehicles, pianos and organs, jewellery, silverware, tinware, glassware, carpets, confectionery, biscuits, brick, tile and many other articles.

The number of manufacturing establishments is estimated at 1,200; the capital invested, \$170,000,000; employees, 92,000; annual salaries and wages, \$42,000,000; annual value of products, \$180,000,000.



Municipal Buildings, Toronto.



Part of Canadian National Exhibition, Toronto.

It gives or offers to manufacturers an abundant supply of cheap electric power from Niagara Falls, and its streets are magnificently lighted at a low rate by the Hydro-Electric System.

The city has water communication to tide water and to halfway across the continent, and excellent railway facilities, both of which make it a great distributing centre. Vessels to the number of 3,514, with tonnage of 1,831,550 tons, arrived in Toronto harbor in 1912; and 335 trains enter and leave the city daily. The summer tourist traffic centring at this port is the greatest in Canada. Twenty passenger steamers arrive and depart daily. The R. and O. Navigation Co. make the city their western terminus.

Since its incorporation as a city in 1834 Toronto has increased in population from 9,000 to 425,000. In 1908 it was 302,000. The city has 508 miles of streets, 113 miles of electric street railway, 50 public parks and gardens, 240 churches, 81 public schools, 9 high schools, 10 public libraries, 7 public hospitals, 165 banks, 146 hotels, and 7 theatres. The street railway carried in 1912, 135,786,573 passengers. A departmental retail store, conducted on a cash basis, employs 12,000 hands. The city has the largest annual exhibition in the world, with an attendance of close on a million. The value of buildings erected in 1908 was \$13,156,652, in 1912 it was \$27,401,761. The total assessment of the city in 1909 was \$227,800,000, in 1913, \$436,120,649. The inland revenue collections for year 1908-9 were \$1,421,937, for 1912-13, \$1,961,610. The port customs receipts for 1908-9 were \$9,664,197, for 1912-13, \$20,261,577. The clearing house returns for 1908 were \$1,166,002,436, for 1912, \$2,170,230,376.

Ottawa.

The city of Ottawa is the capital of the Dominion, and therefore the official place of residence of the Governor-General and the seat of the Federal Government. It nestles in a forest of maples and other trees on high cliffs overlooking the Ottawa River, and commands a view of mountain, river and vale of great beauty and grandeur. The city is noted for its magnificent architecture. The Parliamentary and other government and public buildings, and a large number of private residences, constructed of splendid native stone and brick, are elaborate and striking in design, as well as in the appointment of beautiful grounds. It is abundantly provided with playgrounds, parks, picturesque driveways, shady avenues and splendid boulevards; it is well laid out with clean permanently paved streets, and the electric street railway gives excellent service. "I



Parliament Buildings, Ottawa.

find," says the editor of *Munsey's Magazine*, "that Ottawa is a centre of the highest civilization, a vital force of industry, culture, progress, civic government and beauty. You have not only mastered the enigma of municipal government, but you have made a city so splendid in its physical aspects that it will become a model for the whole Dominion." And another American writer calls it, "Ottawa the Beautiful." The population is 95,570, including suburbs, 128,000.

Nine steam roads enter the city, two others and one electric line are under construction, and there are eight water lines. Four great railways are the Grand Trunk, Canadian Pacific, Canadian Northern, and New York Central, leading to far distant cities. Several branch lines run into the heart of the hunting and fishing country of the Gatineau and Algonquin Park. Water lines are by the Rideau Canal to the St. Lawrence and the Great Lakes, and by the Ottawa and St. Lawrence Rivers to the Great Lakes, Montreal, and the Atlantic seaboard.

The city has 180 industries of various kinds, iron works and foundries, and large factories for the production of paper, cardboard, tents and awnings, marine signals, and cement, giving employment to about 17,000 persons, and paying out in annual wages about \$8,000,000. It has the largest individual lumber factory in the world, the district output in 1911 aggregating 450,000,000 feet, board measure, with a value of \$13,772,000. Vast deposits of raw material of great variety exist nearby, giving great opportunities for many industries.

Ottawa consumes about 75,000 h.p. of electric energy, and has available over 25,000 when required, generated in the heart of the city. The Chaudiere Falls is one of the finest water-powers. Within a radius of 50 miles there is undeveloped power for commercial purposes of very great volume and value.

The city has excellent educational facilities. Among its institutions are the Conservatory of Music, Normal and Model Schools, Boys' College, Collegiate Institute, Ladies' College, and the University of Ottawa. Besides these there are three business colleges and sixty-nine other public and private colleges and schools.

The Central Canada Exhibition, a Live Stock and Poultry Fair, and a Horse Show, all excellent institutions, are held here annually. There is also a very good Annual Exhibition of Motor Vehicles.



Business Streets, Hamilton.

Hamilton.

The city of Hamilton, population about 90,000, is situated on the shore of Hamilton Bay, a beautiful landlocked harbor at the head of Lake Ontario. Behind the city is the mountain or escarpment which extends from Niagara Falls, 42 miles to the east. From this range there is a magnificent view of the city below, with its wide, well paved streets, fine residences and public buildings, and wealth of beautiful shade trees; of the clear waters of the Bay beyond; and of the "Fruit Garden of Canada," on the south east, a picture of beauty rarely equalled on the continent. Out of this "Garden" about a million dollars' worth of fruit is shipped annually, the greater portion of it passing through Hamilton.

The city has excellent facilities by both water and rail. It is the regular port of call for all the steamship lines operating from Montreal to the head of Lake Superior. The Inland Steamship Lines, Limited, have a tri-weekly service to Montreal and intermediate ports. Operating through it are the Grand Trunk Railway; Canadian Pacific Railway; Toronto, Hamilton and Buffalo Railway; and Canadian Northern Railway. It is also the centre of a complete electric railway system for city and suburban travel.

Hamilton is essentially a manufacturing city, possessing all the economic conditions required by large industrial concerns for favorable operation. It has a practically unlimited supply of electric energy from large companies economically generating power from Decew Falls 35 miles, and Niagara Falls 42 miles, distant. The Hamilton Hydro-Electric department is municipally owned and sells power at cost, while the Dominion Power and Transmission Company serves manufacturers satisfactorily.

Manufacturing establishments number 400; capital invested, \$50,000,000; employees, 25,000; yearly wages and salaries, \$14,000,000; yearly value of products, \$50,000,000. The industries include blast furnaces and steel plants, iron foundries, wood-working machinery, agricultural implements, electrical apparatus and machinery, tools, wire goods and wire fence, washing machines and clothes wringers, hardware, silverware, clothing, hosiery, boots, furniture and many other articles.

The facilities for acquiring an education are good, there being 30 public schools, 4 private schools, a Normal School, Technical School, Collegiate Institute and several Business Colleges.

Hamilton is steadily progressive, and possesses many advantages as a residential and business city.



Collegiate Institute, London.



Market Day, Brantford.

London.

The city of London, in the County of Middlesex, 121 miles west of Toronto, has a population of 52,730. It is in the centre of a fine agricultural country, and its market in grain, live stock and produce is one of the best in Ontario.

The main lines of the Grand Trunk and Canadian Pacific Railways pass through it. Branch lines of the Michigan Central, Pere Marquette, and London and Port Stanley Railways also run into the city.

The city owns its own road, the London and Port Stanley, connecting with Port Stanley on Lake Erie, a distance of 23 miles, thus giving a lake port besides furnishing special freight rates to manufacturers.

As a manufacturing city, it is steadily growing in importance. Among its numerous industries are, several agricultural implement works, extensive breweries, car, oil, and chemical works, foundries, machine shops, furniture factories, brick and tile works, brass works and one of the largest stove plants in the empire. Electric power at a low rate is supplied by the Hydro-Electric Commission.

London is an attractive city with wide, regular streets, boulevards, shade trees, and fine residences. About 90 per cent. of the workingmen own their own homes. It is the leading educational centre of Western Ontario, having the Western University, a Provincial Normal School, Collegiate Institute, and twenty-two schools. Occupying 300 acres, the Provincial Asylum for the Insane is located just outside the city limits.

Brantford.

This is a flourishing city on the Grand River, Brant County, 63 miles west of Toronto, with a population of 25,337. It is served by the Grand Trunk, the Toronto-Hamilton and Buffalo Railway, the Lake Erie and Northern Railway, the Canadian Northern, the Brantford and Hamilton Electric Railway, and the Grand Valley Railway. Brantford has large manufacturing interests, employing from 8,000 to 10,000 hands the year round, and including agricultural implements, engines, boilers, machinery, malleable castings, carriages, stoves, woollen goods, etc. The city has the Hydro-Electric power, and the Western Counties Electric power supplied from Decew Falls, and natural gas. There are ten banks, two daily and three weekly papers, a public library, hospitals, churches of all denominations and excellent schools. Brantford has the Ontario Institute for the Education of the Blind.



Collegiate Institute, Windsor.



Central Park, Armouries, Collegiate Institute, Peterboro.

Windsor.

The city of Windsor, Essex County, 230 miles from Toronto, on the Detroit River, opposite Detroit, is in the most southerly part of the Dominion, midway along the chain of Great Lakes, where the principal highways of commerce converge to cross the international waterway. Population, 20,000. It has exceptional facilities by rail and water for reaching the growing western market. Five railways enter the city: Grand Trunk, Canadian Pacific, Michigan Central, Wabash, and Pere Marquette. The first two enter the United States by ferries, and the third by tunnel to Detroit. There is also an electric railway system operating eastward from the city. Four steamship lines operate boats to half a dozen river and lake resorts a few hours distant. The city is the metropolis of the rich fruit and tobacco belt of southwestern Ontario. Its industries include motor cars, salt, drugs, cigars, steel and iron products, machinery, stoves, brass goods, bentwood, paint and varnish, cereals, etc. Natural gas is supplied to manufacturers at a low rate. The city has seven large public schools, four separate schools, several academies, and a Collegiate Institute; well paved shaded avenues, street intersections beautified with flower beds, well-kept public grounds, and attractive homes.

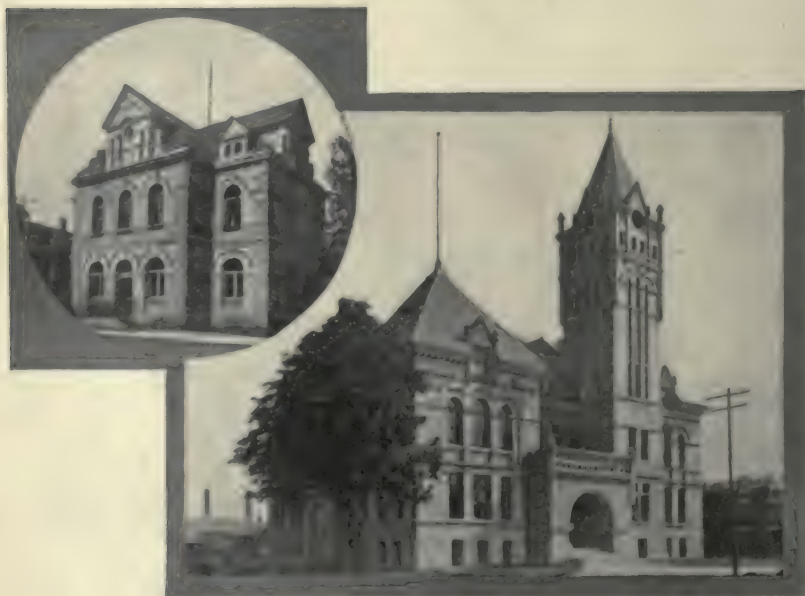
Peterborough.

The city of Peterborough, County of Peterborough, 76 miles from Toronto, population 20,000, is picturesquely situated on the Otonabee River, a part of the Trent Valley system of waterways. It is on the Midland system of the Grand Trunk, and the main line of the Canadian Pacific passes through it. The Otonabee River and connecting waters furnish abundant water power, and Hydro-Electric energy is delivered at cheap rates for light and power. Its industries include an extensive plant for the manufacture of electric machinery and appliances; mining, mill and hydraulic machinery; lumber mills; planing mills; flour mills; agricultural implements; carriages; harness; locks; furniture; canoes; carpets; twine; woollens; brick and tile; pork products; cereal foods; and many other articles. On the Trent Waterway is situated the Hydraulic Lift-Lock, the highest lift-lock and one of the largest monolithic masses of concrete in the world.

The city has a Provincial Normal School, a Collegiate Institute, a Conservatory of Music, a Business College, government buildings, and nine public schools. It has handsome residences and public buildings and several parks of considerable beauty, and is in the midst of a large and rich agricultural district. Adjacent to the city are attractive summer resorts on the Kawartha Lakes.



Kingston, Ontario, G.T.R.



Post Office and City Hall, St. Thomas.

Kingston.

The city of Kingston, Frontenac County, has a population of 19,716. It is situated near the efflux from Lake Ontario of the St. Lawrence River, at the head of the Thousand Islands. It has ideal shipping facilities. Lake and river steamships call daily during the season of navigation. The Rideau gives water communication with Ottawa and intervening towns. Its railways are the Grand Trunk and the Canadian Pacific. The city's leading industries are locomotive works, shipbuilding, foundries, smelting, milling, pianos, textiles, hosiery, transportation plant, etc. It has excellent educational institutions, including Queen's University, School of Mining and Agriculture, Dairy School of the Ontario Government, Regiopolis College, Ladies' College, Collegiate Institute and public schools. There are a number of handsome public buildings and attractive private residences. Near it is a Dominion Penitentiary and a Provincial Asylum for the Insane. Kingston is a fine summer resort and in the centre of splendid fishing grounds. The deepening of the Welland Canal will mean much, as the larger boats will tranship here.

St. Thomas.

The city of St. Thomas, population 16,000, situated 8 miles from Port Stanley on Lake Erie, and 130 miles from Toronto, is one of the most important railway centres in the Province. The city is entered by five leading steam railways, the Michigan Central, the Grand Trunk, the Wabash, the Canadian Pacific and the Pere Marquette, and by one electric railway, the London and Lake Erie, running through St. Thomas from London to Port Stanley. It is a divisional point for all these railways, except the Canadian Pacific. The Michigan Central and Pere Marquette have large railway shops employing many hands. The public buildings—post office, city hall, court house—are all splendid structures. A new Collegiate Institute and five new public schools, as well as Alma Ladies' College, provide the best of educational facilities. The city owns all its public utilities, water works, gas works, electric light and power works, and street railway. Its industries include the manufacture of car wheels, brushes and brooms, knitted goods, shoes, and furnaces; foundry products, planing and flour mills, and a number of smaller industries. St. Thomas is situated in the centre of one of the finest agricultural areas in Western Ontario, and its growth has been steady and healthy, the majority of its citizens owning their own homes.



Public Park and Public School, Berlin.



Saturday Morning in Berlin Public Market Hall.

Berlin.

The city of Berlin, Waterloo County, 62 miles west of Toronto, is on the main line of the Grand Trunk Railway, and has electric connection with Waterloo, Preston, Hespeler, Galt and Bridgeport. It has a population of 16,917, many of which are of German extraction, and 70 per cent. own their homes. The city possesses and operates its waterworks and sewerage systems, gas and electric light, and street railway, and has found municipal ownership of public utilities to be a pronounced success. It has the distinction of being the first municipality to use Niagara power distributed by the Hydro-Electric Commission of Ontario. A city of steady growth and industrial progress it is proud of "Busy Berlin." There are 120 factories and its industries embrace tanneries, rubber goods, felt, planing mill, granite and marble, furniture, pianos, store fixtures, white wear, shirts and collars, boots and shoes, buttons, bedding, woodenware, flour milling, biscuit and confectionery, beet sugar, pork, etc. The new Victoria School, typical of Berlin's educational features and erected at a cost of \$100,000, is one of the finest in the Province. The city is well-kept and up-to-date, and all over are beautiful homes. Victoria Park is one of the most attractive parks in the Dominion.

Stratford.

The city of Stratford, the county seat of Perth, 88 miles from Toronto, is on the main line of the Grand Trunk Railway. Population, 15,076. Six branches of the Grand Trunk pass through the city, making it a great distributing centre, and a favorable location for factories. It is surrounded by a fine farming country, in which are many small towns and villages. The city's industries are, locomotive repair shops, bridge and iron works, threshing machines, flour mill machinery, agricultural implements, wire fences, bricks and tiles, knitting factories, woollens, carriages, furniture and office specialties, clothing, cordage, flour mill, pork packing, dairy supplies, biscuits and confectionery and other articles. The city has several fine schools, including an excellent Collegiate Institute and Technical School, and a Provincial Normal School. Paved with brick and asphalt, the streets are lined with maples and other trees, and many residences are substantial and handsome.



Guelph Residences.

Guelph.

The city of Guelph, Wellington County, 47 miles from Toronto, is on a branch of the River Speed and in the centre of a fine agricultural district. Population, 15,330. It is served by the Grand Trunk and the Canadian Pacific Railways. An electric line leading to it is being constructed by the Canadian Northern Railway. The city owns its waterworks, gas and electric light works, street railway and sewerage system. Electric power is supplied by the Hydro-Electric system. Its manufactures are important and include pianos, organs, sewing machines, carriages, sleighs, furnaces, stoves, radiators, malleable castings, gasoline engines, hardware and wood-ware, carpets, worsted and cotton yarns, knitted goods, clothing, doors and sashes, biscuits, flour, agricultural implements, etc. In addition to good schools and a Collegiate Institute, it is the seat of the Ontario Agricultural College and Macdonald Institute (see under "Agricultural Institutions"). In it is held the Provincial Winter Live Stock and Poultry show. Adjacent to the city is the Central Prison Farm.

St. Catharines.

The city of St. Catharines, Lincoln County, 70 miles from Toronto by rail, is situated on the Welland Canal, connecting Lakes Erie and Ontario, and on the Grand Trunk Railway. Population, 14,741. The Niagara, St. Catharines and Toronto Electric Railway



Street in St. Catharines.

runs from St. Catharines to Niagara Falls, N.Y., and to Port Dalhousie on Lake Ontario, where steamboat connection is made with Toronto, 34 miles distant. An electric street railway extends from St. Catharines to the neighboring towns of Thorold and Merritton. The city is the seat of the Bishop Ridley College for boys. Its industries include paper, flour and planing mills, builders' factories, metal works, threshing machines, agricultural tools, tannery, knitting factory, wire, biscuits, fruit canning establishments and a cold storage warehouse for foods. St. Catharines is situated in a rich fruit-growing and agricultural district, where there are very extensive grape vineyards.

Chatham.

The city of Chatham, Kent County, 180 miles from Toronto, is situated at the head of navigation on the River Thames. Population, 12,039. At its service are the Grand Trunk and the Canadian Pacific Railways, the Wabash, and the Pere Marquette, and there is an electric railway between Chatham, Wallaceburg and Lake Erie. The city has electric light and a first-class system of waterworks, armouries, House of Refuge, fine schools, and a collegiate institute. Its industries are carriage factories, engine and boiler works, builders' factories, flour mills, fanning mills, woollen mills, malleable iron and steel specialties, machine shop, wagons, gas engines, bricks and tiles, pad and textile works, fruit evaporator, canning, and other industries. The city is in the midst of a fertile agricultural district. And in the neighbourhood are good fishing and shooting.

Belleville.

The city of Belleville, Hastings County, population 11,201, is situated at the point where the Moira River flows into the Bay of Quinte and thence into Lake Ontario. It is on the main line of the Grand Trunk Railway, the Canadian Northern Railway, and the Canadian Pacific Railway, and is about 113 miles east of Toronto and 220 miles west of Montreal. It is a port of call for the Bay of Quinte division of the Inland Lines, Limited, plying between Toronto, Montreal, and intermediate ports. Belleville has 40 industries and is the largest cement producing centre in Canada. Among its industries are the following: lock works, flour mills, foundries, rolling mills, planing mills, shirt factories, mattress factory, woollen mills, evaporator, canning factory, boat works, carriage works, paper mills, machine works, furniture factories, brewery, distillery, vinegar works, stone quarries, marble and brick works, tannery, cigar factories, tinware and lanterns. It is also an important market

for agricultural products. The city's residential section is especially attractive because of its wide shaded streets and comfortable residences. The opportunities for boating, fishing and yachting attract numbers of visitors.

It is also a great educational centre, comprising Albert College, Alexandra College for Ladies, St. Agnes School for Ladies, The Ontario Business College, The Belleville Business College, The Ontario Deaf and Dumb Institute, a Conservatory of Music, a Collegiate Institute and a number of excellent schools.

Woodstock.

The city of Woodstock, county seat of the County of Oxford, has a population of 10,136. It is situated on the main lines of the Canadian Pacific and Grand Trunk Railways, 90 miles from Toronto, and is about midway between Detroit and Niagara Falls. It is also on the line of the Grand Trunk running from Lake Erie to Lake Huron and Georgian Bay, and is the terminus of an electric line of railway running between Woodstock and Ingersoll, a distance of some ten miles. The city is situated in a fine agricultural district, particularly noted for its dairy products, and it has a splendid shipping trade in butter and eggs. It has a number of manufactories, including a furniture plant, with an output valued at three-quarters of a million dollars annually; two wagon factories, one with a capacity of 10,000 wagons a year; factories for the manufacture of upright and grand pianos, church and reed organs, piano actions, stools and benches, dove-tail glue jointers, bent goods, castors, implements, garden tools, knitted and woven goods, firearms, school desks, woven wire fencing, biscuits and confections, stoves, vacuum cleaners, bed springs, mattresses, wind mills, braids, motor cars, etc. This city is on the line of the Hydro-Electric Power Commission, is well lighted, and has an abundant pure water supply, both plants municipally owned. Educationally Woodstock is exceedingly well-off: two Colleges, Collegiate Institute, five public schools and a separate school. The Woodstock Hospital for Epileptics, built by the Government, is the first of its kind in the Dominion.

Niagara Falls.

The city of Niagara Falls, 83 miles from Toronto by rail, is situated on the Niagara River near the world famed Falls. Population, 9,410. It is the seat of great power development and the starting point for transmission lines. Three electric plants generate 250,000 horse-power. Railway transportation, into both Canada and



Main Street, Galt.



A Rideau Lake, near Brockville, C.N.R.



On the Rideau, near Brockville, C.N.R.

the United States, is unsurpassed, the Niagara Peninsula being one of the main points of contact for the railways of Canada and the United States between Montreal in the east and the Detroit River in the west. An electric line to St. Catharines and Port Dalhousie, and a steam road to the town of Niagara on Lake Ontario, connect the city with steamboat to Toronto. There is also an electric railway to Buffalo, and one along the river between Queenston and Chippewa, with connection from the former by steamship to Toronto. From Chippewa on the Upper Niagara River there is uninterrupted water transportation as far as the western shore of Lake Superior, giving access to the market of northwestern Canada.

The city's residential advantages are up-to-date, including electric power and natural gas for light and heat. Its industries are, a foundry and machine shop, builders' factories, planing mill, electro-chemical industries, silver works, aluminium novelties, suspenders and neckwear, cereal foods, cannery, and others.

Owen Sound.

Owen Sound, Grey County, 122 miles northwest of Toronto, is located where the Sydenham River flows into Georgian Bay and at the terminus of divisions of the Grand Trunk and Canadian Pacific Railways. Population 12,383. Its harbour is one of the finest on the Upper Lakes. The Northern Navigation Company's steamers leave three times a week for Sault Ste. Marie and intermediate Georgian Bay ports, and other transportation companies also operate. The river supplies power, and the town has a good water system, municipal gas and electric light plants. Its industries are foundries, cement works, tanneries, mill machinery, turbine water wheels, agricultural implements, sash and door factories, woodenware, stoves, woollens, grain elevators, storage plants, flour and oatmeal mills, brick, lime, and other industries.

Galt.

Galt, Waterloo County, population 10,333, is situated on the Grand River, the Canadian Pacific and Grand Trunk Railways, 57 miles west of Toronto. It has electric railway communication with Preston, Hespeler, Berlin, Waterloo, Paris and Brantford. Its industries include engines, boilers, lumber, farm implements, wheels, builders' supplies, beds, brass goods, stoves, edge tools, safes, boxes, leather, boots, underwear. The town has high-class educational facilities, well equipped public institutions, four large parks and is in a rich agricultural district.

Sarnia.

Sarnia, county seat of Lambton county, population 10,048, is on the St. Clair River and the Grand Trunk and Pere Marquette Railways, 170 miles west of Toronto. At this point a submarine tunnel connects the railway systems of Ontario and Michigan. The Northern Navigation steamers run twice weekly from Sarnia to Port Arthur and Duluth and three times weekly to Fort William. During navigation an immense amount of freight is transferred from the railroads here to steamers bound for Port Arthur and Fort William, the bulk of the traffic being destined for the Northwest. The town's industries are lumber, planing and saw mills, gas and gasoline engines, threshers, carriages, spokes and hubs, oil refinery, salt works, cannery, cream separators, chair works, stoves and others. Sarnia has natural gas, street railway, fine schools and a good water front.

Brockville.

Brockville, the county town of Leeds and Grenville, population 9,339, is on the River St. Lawrence, 125 miles west of Montreal. It is on the main line of the Grand Trunk; is connected with Ottawa by a branch of the Canadian Pacific; is a terminal of the Brockville, Westport and Northwestern, and its shipping facilities by rail and water are excellent. The tourist steamers of the R. and O. Navigation Company call at Brockville daily during the summer. The town is the centre of an important dairying section; cheese sold by the Dairymen's Board of Trade exceeds in value three million dollars annually; and it has a number of factories employing from 200 to 400 hands each besides smaller industries. It is beautifully situated at the eastern gateway to the famous Thousand Islands. Summer cottages extend along the St. Lawrence for 10 miles. Within two hours' ride by the C.N.R. is a chain of lakes, the Rideau, Beverley, Charleston, etc.—a paradise for anglers.

Oshawa.

Oshawa, Ontario county, population 8,000, 33 miles east of Toronto, is on the main line of the Grand Trunk, is on a branch of the Canadian Northern, and connects with Lake Ontario by the Oshawa Electric Railway. It has a wide reputation as a manufacturing centre and contains the largest carriage plant in the Dominion. Among its foremost industries besides carriages, are motor cars, malleable iron, metal roofing, interior fittings, leather,

woollens, textiles, canning, steel ranges, pianos. Its chief industries employ over 3,000 people. It is a fine residential town, with high and public schools, electric light and power, street railway, well paved streets and attractive parks.

Lindsay.

Lindsay, Victoria county, population 7,414, 70 miles from Toronto, is the centre of a fine farming district. Its railway facilities are the Grand Trunk and Canadian Pacific, and it has steamboat connection with summer resorts on the Kawartha Lakes. Its industries include lumber and saw mills, agricultural implements, mill machines, flour mills, tannery, woollen mill, builders' factories, and canoes. The town is supplied with electric power.

Collingwood.

Collingwood, Simcoe County, 94 miles from Toronto, is on the south shore of the Georgian Bay and on the Grand Trunk Railway. It is the terminal of the Georgian Bay division of the Northern Navigation Co. Population, 7,291. During navigation season it



Launch of SS Collingwood—length, 405 ft.; beam, 30 ft.; depth, 28 ft.

has steamship communication with leading lake ports—Sault Ste. Marie, Mackinac, etc. It has extensive dock accommodation, and the largest dry dock on the upper Canadian lakes. Its industries include the largest steel shipbuilding plant in Canada, nail and wire factory, grain elevator, foundries and machine shops, saw and planing mills, flour mill, meat packing and canning plant, fruit and vegetable cannery, apple evaporator, tannery, biscuit factory, etc.

The town owns the waterworks, electric light and hydro-electric power, and it has a Collegiate Institute, an armoury and a government fish hatchery.

Cornwall.

Cornwall the first important town west of Montreal and distant from it 68 miles, is on the St. Lawrence River 5 miles east of the Long Sault Rapids. Population, 6,479. The Grand Trunk, and the Ottawa branch of the New York Central system give it railway connections north, south, east and west. During navigation the tourist steamers of the R. O. and N. Co. call daily. The Cornwall canal supplies water-power for a number of important industries. The town has large cotton mills, a foundry, saw, paper, woollen, and flour mills, furniture, bedstead, clothing and builders' factories, etc., an electric street railway and good schools.

Other towns are—Smith's Falls, Barrie, Orillia, Cobourg, Pembroke, Welland, Port Hope, Ingersoll, Midland, Goderich, Waterloo, Hawkesbury, Paris, Arnprior, Petrolea, Preston, Carleton Place, Simcoe, Penetanguishene, Gananoque, Wallaceburg, Walkerville, St. Mary's, Picton, Perth, Newmarket, Campbellford, Dunnville, Parry Sound, Walkerton, Rockland, Brampton, etc.

The following are the cities and the more important towns:—

IN NORTHERN ONTARIO.

Fort William.

The city of Fort William, 862 miles from Toronto, is situated on the Kaministiquia River, flowing into Thunder Bay, on the western shore of Lake Superior. Dividing into three channels at its mouth the river has about 26 miles of water within the area of the city limits and, with improvements, constitutes one of the finest

harbors in the Dominion. It is the terminal port of the Canadian Pacific Railway steamship service from Port McNicoll and the western terminal of the Inland Steamship Lines, Limited, and there are a dozen boat companies, all regular package freighters, besides numerous other craft trading on the lakes. The tonnage represented by 3,824 vessels registered here in 1912 was 6,731,386 tons, an increase of 1,258,576 tons over 1911. Enormous quantities of grain from Manitoba and the Northwest are transhipped here to the lake vessels. During the period of navigation in 1912, including the balance of the 1911 crop, the total grain receipts amounted to 115,000,000 bushels; there were unloaded at the docks in 1912



Private Residence, Fort William.

Y.M.C.A., Fort William.

237,360 tons of steel rails; and the C.P.R. handled 610,918 tons of general merchandise, an increase over 1911 of 2,873 tons. Railway facilities include the Canadian Pacific, the Grand Trunk Pacific, and the Canadian Northern, the terminals of the two former making a total yard capacity of 175 miles of track. The actual figures connected with the freight receipts by the railway companies are not available, but tonnage over docks and cars over railways are estimated to be greatly in excess of any previous record.

The manufactories include an iron and foundry plant, stove, flour, broom, brewing, brick and tile, sash and door, and lumber

plants, brass foundry, shipbuilding and various other industries. New industries which have arranged to establish here and have commenced operations represent an expenditure of almost \$4,000,000, and involve the employment of nearly 3,000 hands. These industries are railway rolling stock (locomotives excepted), starch, bedding, wire fence, tubes, nails, steel railway equipment, brick and tile, pressed brick. The terminal elevator capacity in 1912 was 20,414,000 bushels; now under construction, 7,750,000; total 28,164,000. The value of improvements carried out in 1912 along the water front of the city, including dredging, docks, elevators and warehouses, reached a total of \$14,000,000.

The water, light, telephone and sewerage systems of the city are municipally owned and controlled, as is also the electric railway. Hydro-Electric power is generated from Kakabeka Falls,—45,000 horse-power has been already developed, and can be increased to 100,000. The city streets are clean, paved and boulevarded; there are many handsome business blocks, apartment houses and residences; and eight public parks and playgrounds. The city has a Y.M.C.A. building which cost \$120,000, a Collegiate Institute and eight public schools. The population in 1907 was 13,882; in 1912, about 25,000. The assessment for 1912 was \$24,362,267; for 1913, \$38,895,251.

The city is in a mineral district of hematite and magnetite ore, and adjacent is a fertile agricultural country where many settlers have located. In the districts west of Fort William there are 480 men working in connection with the Ontario Government new roads construction, which will prove a boon to the farming community. Big game, moose, deer, bear, etc., are found in close proximity to the city, while small game abound in the neighbourhood. Hundreds of tourists visit Fort William and vicinity.

Port Arthur.

The city of Port Arthur, situated on the shore of Thunder Bay, at the head of navigation on Lake Superior, is on the main line of the Canadian Pacific Railway, and is the lake terminus of the Canadian Northern Railway. It is about 1,400 miles from tide-water on the St. Lawrence at Quebec, and about 1,900 miles from the Pacific Ocean. The city is the Canadian terminus of the Northern Navigation Company, the Booth and White Steamship line, the Montreal and Lake Superior Steamships, and the Chicago and Duluth Transportation Company, the headquarters of the

Canadian Northwest Steamship Company, and a calling port for the Canadian Pacific and for sixteen regular freight steamship lines. A branch of the National Transcontinental passes through the town northwestward to its main railway. Much of the merchandise of the east is transferred here from water to rail, while grain from the west is transhipped to the vessels of the lake.

The chief industries on which the city depends include lumbering, mining, milling and farming, and it is the centre of the fishing industry on the Canadian side of the lake. Lumber mills represent a capacity of 50,000,000 feet per year; a blast furnace for iron has a capacity of 100 tons pig iron per day; and water-powers near the city supply a large flour milling centre. A shipbuilding company



Collegiate Institute, Port Arthur

employs over 500 men; wagon works, with a capacity of 15,000 wagons per year, employ about 200 men, and a rolling stock manufactory (under construction), with an output of 40 freight cars per day, will employ about 1,000 men. A coal dock has a capacity of 800,000 tons, and the Canadian Northern elevator has a capacity of 9,500,000 bushels of grain.

Port Arthur is the judicial centre for Thunder Bay District, and located in it are its government offices. Its population is 15,654. It has five divisional public schools and a Collegiate Institute that cost \$150,000. The city owns and operates all public utilities. Built on a hillside rising in three natural terraces to a height of 250 feet,

with wide streets permanently paved and electric lighted, and with many handsome residences surrounded by well-kept lawns and luxuriant foliage, Port Arthur is an attractive home in which to reside. In the neighbourhood are rich farm lands.

Sault Ste. Marie.

Sault Ste. Marie, on St. Mary's River, District of Algoma, population, 10,613, is on a branch of the Canadian Pacific Railway and is the terminus of the Algoma Central and Hudson Bay Railway. It is the western terminal of the Georgian Bay division of the Northern Navigation Company. The Algoma Steamship Line operates a fleet of freight and passenger boats. The town's industries are supplied with electric power. The chief industries in which millions of dollars are invested are represented by iron and steel plants, and wood-pulp mills. The traffic of the upper lakes, which is exceedingly large, passes through the Canadian and United States canals at Sault Ste. Marie, between Lakes Superior and Huron.

North Bay.

North Bay, 360 miles west of Montreal, is on the north shore of Lake Nipissing, at the junction of the Canadian Pacific, the Grand Trunk, and the Timiskaming and Northern Ontario Railways. The population is over 9,000. It is a divisional point of the C.P.R., employing several thousand men. Its principal industries are lumbering and related manufactures, a foundry, machine shop and smelter. In addition to high, public and separate schools, there is a Normal School maintained by the Province. The town is well equipped with electric light and water systems. To the southwest is the beautiful summer resort on the French River. Game of all kinds is in the vicinity, and easily reached by railroad and steamer.

Sudbury.

Sudbury, in the District of that name, is on the main line of the C.P.R., at its junction with branches to Sault Ste Marie and Toronto. It is also served by the Canadian Northern Ontario and the Algoma Eastern Railways. Population, 5,000. The town owns and operates its electric light, water and sewerage systems. It has high, public and separate schools, an opera house worth \$50,000, and religious institutions worth over \$200,000. The resources are lumbering, mining, railroading, and agriculture. It has a large foundry and machine shop, large planing mills and brickyards, and a flour mill with a capacity of 2,000 barrels per day. The nickel mines in the neighbourhood are the largest in the world.

Kenora.

Kenora, District of Kenora, a divisional point of the C.P.R., 292 miles northwest of Fort William, is at the efflux of the Winnipeg River from the Lake of the Woods, and at the foot of 200 miles of navigation. Population, 6,000. The Rainy River Navigation Co. has a line of steamers to Fort Frances, while other vessels have regular routes to other points. Its principal industries are flour-milling, lumbering, mining and fishing. The Rat Portage Lumber Co. has a large annual output; the Maple Leaf Milling Co. has a capacity of 2,500 barrels of flour per day, and the Lake of the Woods Milling Co., Keewatin, 3 miles west, has two flour mills with a joint capacity of 9,000 barrels per day, and a flour barrel factory with an output of 1,000 barrels per day. There is a minimum of 22,000 horse-power, partly developed, at the two branches of the Winnipeg River nearby. An attractive summer resort, with fishing and hunting in the vicinity, Kenora commands a beautiful view of the Lake, which is picturesquely dotted with thousands of islands.

Cobalt.

Cobalt, 330 miles north of Toronto, is on the Timiskaming and Northern Ontario Railway. Population, 5,630. It is one of the richest silver districts in the world. Contributed mostly by the Cobalt camp, the production of silver in Ontario in 1912 was 30,322,805 ounces or one-seventh of the world's output. The town has a machine shop and foundry, sampling plant, and a number of concentrators, several wholesale supply companies, and such modern conveniences as electric cars, electric light and telephone service.

Porcupine.

Porcupine, the terminus of a branch line 26 miles west of Iroquois Falls, on the T. and N. O. Railway, is an important gold mining district. The mines whose stamp mills are under construction or actually at work are the Hollinger, Dome, McIntyre, Vipond, Jupiter, McEnany and others. Population, indefinite, 7,000 or 8,000.

Haileybury.

Haileybury, on the T. and N. O. Railway, 3 miles from North Cobalt, is the new judicial seat of the north and is one of the oldest and most beautiful towns in Northern Ontario. Population, about 4,000. The town commands a splendid view of Lake Timiskaming

over to the Quebec side, has a good waterfront and harbor, and has large public buildings and handsome residences. It is the headquarters of the Timiskaming Navigation Co.

New Liskeard.

New Liskeard, on the T. and N. O. Railway, 5 miles north of Haileybury, is in the midst of a rich agricultural country and is the "gateway" to the Great Clay Belt. Population, 3,700. At the head of Lake Timiskaming it is well equipped with steamboat service to all points on the lake and its tributary navigable rivers. The Nipissing Central Railway (electric) connects New Liskeard with Haileybury and Cobalt. A town of excellent public utilities and modern buildings, it has a variety of industries which employ between 400 and 500 men, several Government offices, good schools, and a fine public library.

Other towns are—Copper Cliff, Steelton, Sturgeon Falls, Blind River, Fort Frances, Thessalon, Mattawa, Keewatin, Little Current, Dryden, Massey, Rainy River, Cochrane, Englehart, Hearst, etc. The last four are railway divisional points.

NOTE.—It must be understood that the Bureau of Colonization is not advertising particular industries or even towns or cities, but is aiming at showing substantially the greatness of the Province in these aspects as a setting for the prime interests of agriculture. Hence full lists of towns or industries are not essential to its aim.



Short course in Live Stock on a Manitoulin Island farm.

NORTHERN ONTARIO.

Northern Ontario has been already dealt with in considerable detail in the Ontario Government's handbook of that name, which may be had free on application. The following editorial portrays that vast region briefly but with suggestive comprehensiveness:—

The Province of Ontario is 200,000 square miles greater than France or Germany. It has a population of 2,500,000. When you consider that France has nearly forty millions, and Germany nearly sixty-five millions, you get a faint idea of the possibilities of Ontario.

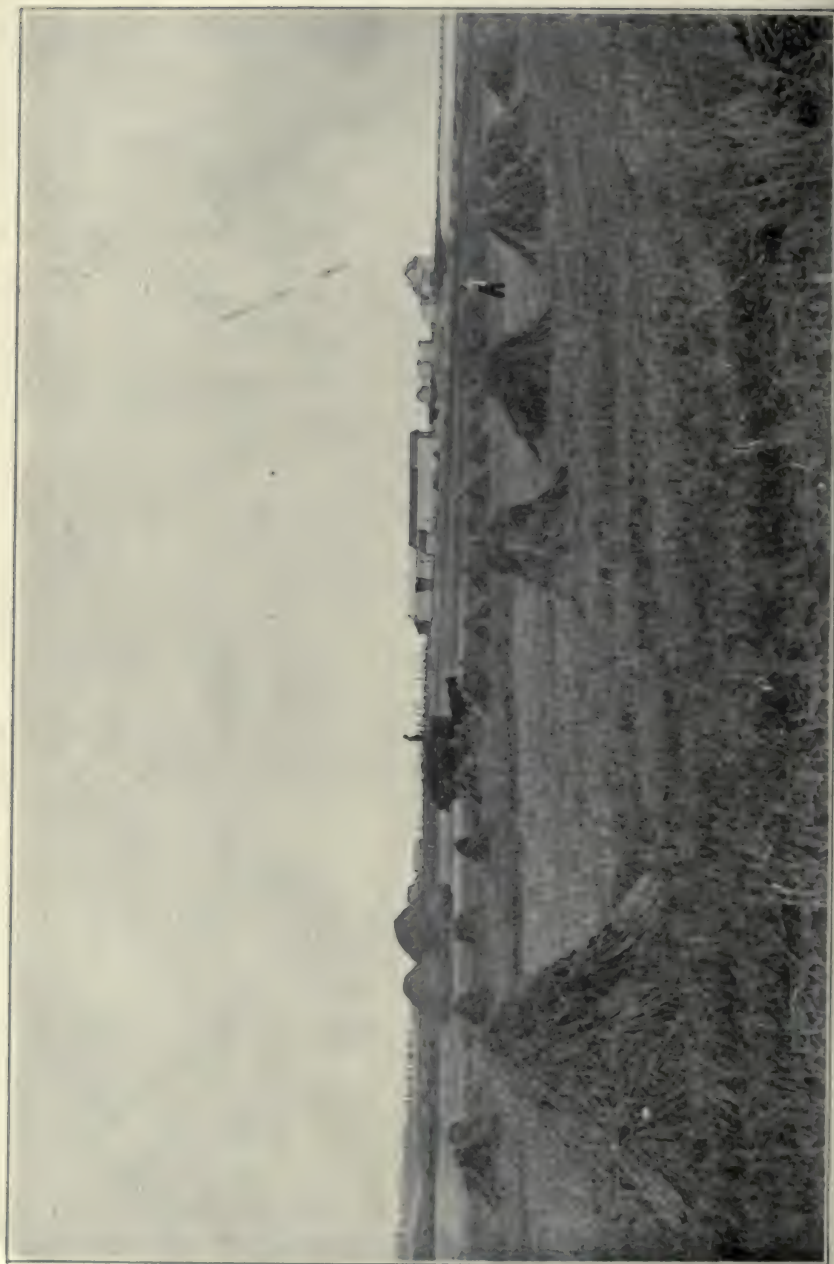
But there is another remarkable fact. The bulk of the population of Ontario is found within a very small part of its area—the southern part, most of it lying within a couple of hundred miles of Toronto. After deducting this you still have an area far greater than France or Germany still waiting to yield its wealth to settlers and other enterprising people. Though very sparsely settled, it is not by any means inaccessible. It is traversed from east to west by the Canadian Pacific Railway, and ere long there will be three railways instead of one. Northward, the Timiskaming and Northern Railway, owned by the people of Ontario, has reached a point five hundred miles north of Toronto, and now the survey has been made in James Bay, in Canada's great northern inland sea. Branch railways and roads are being constructed in every direction.

The history of New Ontario is a history of surprising discoveries. First, we, in Old Ontario, heard of Muskoka, a great playground, a place for camping, boating, fishing, and hunting. The railway made its way farther north, in the hope of finding good agricultural land. Suddenly came the announcement of the discovery of silver mines of amazing richness, and a great mining population swarmed into Cobalt and the surrounding country. The discovery of gold caused another sensational influx of population.

Still farther north was found a fertile tract of land, the clay belt, rivaling the Western prairies in wheat producing qualities, and well timbered and watered. This will be reached by the Ontario Government Railway, the Grand Trunk Pacific, and the Canadian Northern Railway.

The process of discovery is not yet complete. We have already found silver, gold, nickel, water-powers, timber, land capable of producing the finest grains and vegetables, spacious playgrounds for health and pleasure. There may be more surprises. There is surely reason to hope that in this vast region there are homes for millions of people, and opportunities for men and women who have the qualities of the pioneer, qualities which have marked all the races that have played their part in building up the Canadian nation.

—*Star*, June 25, 1913.



Harvesting oats in Northern Ontario.

PROGRESS AND FUTURE.

Under this head may well be placed an editorial each from two leading newspapers of Toronto. The first, though merely touching Ontario, deals broadly with the Dominion, and inasmuch as lesser and greater are essentially bound up with each other, the question of progress is common. The second, though also taking a wide view, concentrates attention upon Ontario.

The Story of a Year's Progress.

In his excellent annual review of the financial year, Mr. Fred W. Field, editor of the *Monetary Times*, takes the ground that Canadian progress is not being overdone because over a thousand settlers enter the Dominion every day, and because as a consequence great stretches of virgin soil are being constantly rendered productive, to say nothing of the new towns that arise every few weeks in Northern Ontario, on the prairies and in British Columbia. In fifteen years we have secured 2,300,000 citizens from abroad, and to-day the influx is at the rate of 400,000 per annum. Those who have come within the last eleven years have brought with them in cash and settlers' effects about \$700,000,000. Their labour adds immensely to the aggregate wealth of the nation; they greatly enlarge the purchasing power of the domestic markets, and from \$200,000,000 to \$300,000,000 per annum of British money follows them into this land of their adoption.

British capitalists have lent us \$2,000,000,000, which has gone into steam railways, canals, electric railways, financial and municipal enterprises, and land and mine investments. Lest outsiders should fear that our commitments are overdone, it is noted that our farms, mines, fisheries, forests and factories have yielded \$2,028,744,433 in a single twelve-month period. Thus our factory output and the products of our barely touched natural resources for one year equal in value Canadian borrowings from the Old Country investor to date. Largely because of our National Policy of moderate protection, American industries have invested \$500,000,000 in this country.

The *Monetary Times* thinks that, despite some reckless gambling in real estate, the Dominion, instead of being at the end of a period of development, is really at the beginning of a new era of growth agriculturally, industrially and commercially. In the next few years the great tracts of arable land in Northern Ontario will join the Prairies in the production of wheat and other farm stuff on an extensive scale. The older parts of the country will increase their agricultural output several times over under the adoption of improved methods of farming. The vast amount of railway construction still to be done, the building and deepening of canals and the other public undertakings under way and in view, mean the continued outlay of great sums of money, and there is no reason to look for a setback, unless it be as a result of some international disaster of world-wide effect.

For the first time both our foreign trade and the public deposits with the chartered banks have crossed the billion dollar mark, and the prospect is that they will grow much faster than ever during 1913 and succeeding years. In one article Sir Edmund Walker points out that, despite certain agitators to the contrary, hundreds of the largest Canadian bank credits are granted at places far removed from the cities. Sir Edmund Osler shows that we are borrowing heavily to provide hundreds of thousands of newcomers with transportation facilities and other conveniences of civilization. As he sees it, there is no anxiety for Canada's future. But extravagant, reckless financing and wild-cat speculations must be curbed if the best results are to be got from the natural wealth with which we have been endowed.—*News*, January 15, 1913.

The Future of Ontario.

The oft-repeated assertion that before long the West will dominate the East because its population and resources will be greater than those of the older Provinces of Confederation is worthy of some attention. The *Globe*, which under the far-seeing direction of Mr. Brown campaigned fifty years ago for the purchase from the Hudson Bay Company of the land now embraced in the Prairie Provinces, and which has been a steady friend of Western development from that day to this, will not be accused of enmity to the West when it says there is no possibility of that portion of the Dominion west of the Great Lakes becoming more influential in the national councils than the East.

The potentiality of the West is great, almost unthinkably so. But here in Ontario alone there are natural resources in sufficient quantity and variety to support the population of Great Britain and Germany combined. The history of the Eastern and Western States of the American Union will be repeated in the history of Eastern and Western Canada. Minnesota, the Dakotas, Iowa, Nebraska, and the other great agricultural States of the Middle West may have held the belief forty years ago that they would become as populous and powerful as New York, and Pennsylvania, and Ohio. There was the same rush of immigration then into these mid-Western States that is now going into the Canadian Northwest. They drained New England, and took much of our own best blood. But the point of saturation in these States has been almost reached, while the great industrial States of the East still absorb an increasingly large proportion of the inflow of immigration.

To Western Canada Ontario and Quebec will continue to bear the same relation as New York, and Massachusetts, and Pennsylvania, and Ohio bear to the Western States. Ontario alone, with the single exception of coal—for the absence of which compensation is found in an abundance of electrical energy—has resources as great as the four States above mentioned with their population of almost thirty millions. Its mineral resources are as varied as they are valuable. Gold, silver, nickel, copper, iron ore, mica, and many other ores and minerals are produced in large volume. Its forests are still of huge extent and great value. In paper-making its spruce is second only to that of Quebec. For all time thousands of highly paid operatives will find occupation in the paper and pulp mills of the remote north. The soil of Southern Ontario is far more fertile than that of any other Province of the Dominion. Its factories increase daily in number and in variety of output. Industries depending upon cheap electric power in large quantities will inevitably gravitate to the water-power developments that are so widespread.

Ontario still has more population than all the Western Provinces combined, and the wave of immigration from Britain is adding rapidly to it. Ten years ago Winnipeg men were confident that their splendid city would soon outstrip Toronto. We do not now hear such assertions, because Toronto in the past ten years has added almost as many to her numbers as the entire population of Winnipeg. In the growth of Ontario as a whole we shall find that while the population increase will be slower than in the West it will continue—probably at an accelerated pace—long after the land is all taken up in the agricultural Provinces of the West and the rush of settlement slackens. The country west of the lakes, which has a little over two million people in it to-day, will have almost five millions twenty years hence. But by that time Ontario alone will have over four millions of very happy and prosperous people, and at their hand for the production of wealth such resources in field, forest, and mine as no other four million people in the world will have. The future of Ontario is in no doubt. This Province will long remain what it is to-day: the most populous and powerful of the Canadian Confederation.—*Globe*, June 16, 1913.

COLONIZATION AND IMMIGRATION.

The Colonization Branch of the Department of Agriculture has found the present year, 1913, the most successful in the Department's work of immigration. Last year the number of farmhands received and placed in the province was 2,553. This year the number is over 2,700, and it is expected that by the beginning of September it will exceed 4,000. They have all come from the British Isles; 60 per cent. English, 25 per cent. Scottish, 15 per cent. Irish; and they are the best class of men as yet secured. There has also been less difficulty in placing the men upon farms, which is partly due to the fact that farmers are treating their hired help more considerately, and to the fact that the industrial demand for new arrivals is not so great in the cities as formerly. The number already placed is only one-tenth of the men that have been induced to come, and they have been distributed as equally as possible throughout the Province. Altogether, the indications are that the farmers will be served well in the coming harvest, and they look forward to that season with satisfaction. Another feature, and one making for stability, is, that engagements for the whole year have now run up to 75 per cent.

The Bureau of Colonization has a branch office at 172 Front Street West, facing the Union Depot, the one (joint) railway station in Toronto City. All immigrant trains are met in this city by a special government officer, the immigrants are advised on the question of luggage and accommodation, and as soon as they are booked for a situation on a farm they are guided in the purchase of tickets and the checking of baggage for their further short journey by rail. From the time of landing in Toronto until put on a train for the farm the immigrant is under the care of government officials. And official interest does not stop at that—each one is given a stamped postcard addressed, so that if in need of further advice or a change of position the immigrant has only to write the message and drop the card in the nearest post box; or, if urgent, he may phone or wire. Such is the particular care taken of immigrants by the Provincial Government.

Domestic servants are in very great demand, and over 4,000 have been placed during the past twelve months.

Last year the Ontario Government voted \$20,000 to be used in assisting farm labourers and domestic servants. This proved very satisfactory in securing a superior class of people, with good references. Out of the sum voted the Department has collected 85 per cent. back. This year the Government has increased the grant to \$25,000.



Party starting from the Old Land for Ontario.



The Farm Hand.

Ontario is a place of work, and no man needs to beg a brother of the earth to give him leave to toil. The province does not call for the clerk or the professional man: he is not wanted, unless able and willing to do manual work. It is in special need of the farm hand, the man of experience. Rapidly growing cities and towns are drawing heavily upon country produce. The lure of the city, the Northwest, and the wanderlust draw away the farm hand, not always to his advantage. So that the farm wants the worker, and strong resolute men, whether experienced or not, are welcome. They will get good wages and good food. Their training in civilized conditions is distinctly valuable, should they aim or finally desire to grapple with the pioneer work of the Northwest or of Northern Ontario. Better still—what is equal to a farm in advanced and educated Old Ontario? A few years' savings, as actual experience proves, will enable the farm hand to rent one for himself, with the aim of having it finally as his own.

The Farmer.

The Province offers great inducements to the tenant farmer of the Old Land. Before him is the opportunity of settling down where the rough experience of the pioneer is past. Improved land may be purchased at from \$30 to \$100 per acre, the value of buildings being included in the higher figure. Farms may be purchased at from \$500 to \$50,000. In the list of improved farms for sale (see "Farming Opportunities in Ontario," published by the Ontario Government) the price named for the farm includes land and buildings, but not stock or implements, unless mentioned. The farmer will usually accept a partial payment in cash with mortgage security for the rest. The price is not for leasehold but for a sale in fee simple. The tax is not levied by the Government but by the local municipality, and is very reasonable, amounting usually to about 50 to 60 cents on the \$100 of property value. There are various reasons for farms being offered for sale. In many cases farmers' sons have secured farms in Northern Ontario or the Northwest Provinces, or have been attracted to the towns and cities, leaving the head of the family dependent on hired help, often inefficient, and quickening the desire to retire from active life. In other cases the owners are men engaged in business, who rent their farms, which generally means a falling off in attention and fertility, and a consequent wish to sell, and in others there is the desire to realize a good profit. Some of these farms are offered at value, others at less, giving the opportunity of a splendid investment to the man of some capital who desires a healthy independent life. With expand-



Cathedrals and Churches, Toronto.

ing cities and advancing values, the opportunity of investment will not always be at comparatively easy command—it will not last. Some day, perhaps soon, Ontario, with its great advantages, will be appreciated at full value. Here are people chiefly of British stock and Imperial sentiment; comfort and civilization; newspapers everywhere; fine schools and free education, high schools, colleges and universities; and churches of the leading denominations. Here are numerous agricultural and other organizations, instructive and conducive to friendship and happiness, and the ample guidance of the Department of Agriculture. Here are the telephone, the electric light, the electric railway, and a network of railways affording transport for the products of the farm to the various towns and cities throughout the Province. And here farmers prosper. In one county they own more than a hundred motor cars. In the Province there are close on 60,000 rural telephones, representing a capital investment of about \$5,000,000. With convenient mail and telephone service the farmer of Ontario is in active touch with his neighbours and the busy world. All this, with the fact that Ontario can be reached in a week or little more, is worth the consideration of the tenant farmer of the British Isles.

ONTARIO'S OFFER TO IMMIGRANTS.

In the year ending Oct. 31, 1912, there were over 16,000 callers at the Ontario Immigration Office in the Strand, London, and from this office and the one in Ireland were sent out 7,580 emigrants, possessing in all about a million dollars capital. This direct Government immigration work represents only about a tithe of the British emigration interest in the former Province of the Dominion. By reason of its varied and complementary resources and production, including the greatest farming and manufacturing activity in the country, Ontario holds out to the newcomer a wealth of opportunities. Its area, for instance, is more than that of three United Kingdoms, but as yet only about 20,000,000 acres have passed out of the hands of the Crown. On this immense heritage 2,500,000 people are working in the midst of natural riches and opportunities such as are given to few populations on the globe. Half of them are on the land in the rural districts, half of them in the cities and towns. The farmers have land valued at \$750,000,000, buildings \$315,000,000, implements \$86,000,000, and live stock \$125,000,000, a total wealth of \$1,400,000,000. Surely this betokens agricultural prosperity. The chattel mortgages against farmers do not exceed \$200,000. In manufacture also, the immense water-powers, the timber areas, the mineral resources, and transportation development have made Ontario the workshop of the Dominion. Over \$600,000,000 of products are manufactured here yearly, or more than half of the total in the nine Provinces. Ontario prosperity is substantial because it is well balanced, because it is touching only a fringe of the possibilities. The earnest and diligent seeker after opportunity finds it here to his heart's content. Northern development, bringing into settlement through the Government railway and a network of roads an immensely fertile country, yet almost virgin, means the duplication of the growth of older Ontario. For decades to come, this Province, with its immense resources, will give rich rewards to all newcomers who deserve them—*Mail and Empire*, June 26, 1913.

CIRCULAR TO SETTLERS.

ONTARIO DEPARTMENT OF AGRICULTURE,

BUREAU OF COLONIZATION,

TORONTO, December, 1912.

DEAR SIR:—

As you have now been a resident of Ontario for some time, I would like to hear from you as to how you are getting on; also how you like Ontario and what you think of it from an agricultural standpoint. I would also like to have you point out the advantages (if any) it has for you over the Old Land and for others willing to work and make homes for themselves, and if you can recommend it to others who may desire to emigrate and who would be glad to have information from an independent source regarding conditions here.

With your permission, I would like to have your letter for publication in our literature for circulation in Great Britain.

If we can be of any assistance to you, or can give you any information at our disposal that may be of value to you, I hope that you will not neglect to write us or call at this office.

Kindly let me hear from you.

Yours truly,

H. A. MACDONELL,

Director of Colonization.

Please give us your address before coming to Ontario.

LETTERS FROM SETTLERS.

CARE J. S. CURRIE, Esq., Box 318, COLLINGSWOOD, Dec. 24, 1912.

Having experienced a spring, summer, fall and some winter weather in the Province of Ontario, I have been able to form an opinion of this Province. I am progressing first rate; far better than I expected. In the Old Land I was a farm pupil for three years and an assistant for three years, but beyond gaining experience I was no better off than before I started. As regards money matters to-day, I stand worth dollars which run into three figures. This alone speaks for itself. Ontario as an agricultural country is almost perfect. In my opinion there is every chance for the farmer to cultivate everything to perfection, that is, crops which farmers direct their attention to. Dairy farming and fruit cultivation are, in my opinion, the two chief branches of agricultural work which Ontario is fitted for. As regards the advantages it has over the Old Land, all I can say is that it has many. For instance, the weather; what summer we had was delightful, and the cold is so dry and clear that I have not felt it. Work here is far easier. Horses handled much better; in fact, one man can do as much here as two men can do in the Old Country, and then will not be so tired. Ontario offers every opportunity to the workingman. Work is very plentiful and wages exceedingly good. The new comers will find on arriving in this country every opportunity, namely, every consideration will be shown them by the Government. The immigrants will be placed with good farmers, where they are treated well, have comfortable homes, and gain sound practical knowledge in agriculture.

In conclusion, if there is any young man (or woman) in the Old Land who cannot at least earn £1 per week with board, lodging and washing, the finest thing for them to do is to pack up their baggage and come to the greatest Province of the British Empire.

FRED. E. EARY,

Late of 50 College Rd., Reading, England.

CARE T. H. BANTING, IVY, ONT., Dec. 31, 1912.

In answer to your kind letter would say that I am getting on very well now, and am getting used to farming.

I did not get a very good situation at first. Now I am getting \$1.30 for a year, and am with a far nicer set of farmers, etc.

In regard to myself, I have found Canada much better than I expected. The fresh air and farm work are delightful, and although it is a little hard at first I am getting used to it.

I say no one can do better than come out here from home. I know the life in England—a poor and miserable existence, that poor, hardworked, underfed and not overpaid men and women drag along day after day. Whereas out here in the open country all that is wretched is forgotten and a life of peace and happiness in work is substituted.

EDWIN E. HARVEY

Care EDWIN PEART, Esq., NELSON, ONT., Dec. 23, 1912.

I received your letter asking how I was getting on and how I liked the country. I have been with Mr. Peart now for seven months, and am getting along all right. I think this country is much better than Scotland for the workingman. One gets better wages and does not need to work any longer hours. The work on the farms is much the same as in the Old Country. The workingman out here, if he is careful, has every chance of having a farm of his own in a few years, whereas in Scotland a man with a family has a hard struggle to make a living. I think if the farmers here could get more men to work their farms better they would grow excellent crops, as the soil is good, but only needs cultivating, and any man coming here from the Old Country need not be afraid but that he will get on all right if he is willing to work. You are well treated when you land in Canada. I have to thank you very much for placing me in a good position and doing all you could for me when I came.

DAVID HENDERSON.

Former address—Mowhaugh, Roxburghshire, Scotland.

HAMPSTEAD, ONT., Dec. 25, 1912.

I have now been out here about nine months, and so far like it very well, and I am getting along much better than I expected to do.

Ontario certainly has many advantages over the Old Country for any one able and willing to work. Land is cheaper and more easily obtained, and work is plentiful at about double the wages offered in the Old Country. The work on farms is not nearly so heavy nor are the hours as long, and the food provided on the average farm is much better. To me the greatest advantage lies in the fact that "Jack is as good as his master." I can, therefore, without hesitation, advise any one willing to work to improve their position and make a home for themselves to come to Ontario.

C. GAUTBY.

LYONS, ONT., Dec. 2, 1912.

Having been in Ontario for seven months, I am pleased to let you know I am getting on all right and that I like it very much out here. I have just sent for my wife and family. There is one thing that I am sorry for, and that is that I did not come out to Canada before. There is plenty of fruit, vegetables and corn grown here in abundance, so that a workingman can get for nothing what he cannot afford to buy in England. I am still at the same place you sent me, having engaged for a year at \$20 per month and board, averaging £6 13s. 4d. in English money. One would have to work two months for that on a farm in England. I shall get more money next year, as I shall be more experienced in farm work. There is plenty of work here and farm hands are very badly wanted. I was offered four different situations while I was walking three miles from the railway station to Mr. McCredie's farm. I am pleased to say I am very well satisfied with the situation you sent me to, and I would advise others to apply to your office, as they will find it much better than coming out on their own responsibility.

W. G. HOPKINS.

Former address—Peckham, London, England.

REV. P. O., Oshkosh, Dec. 29, 1912.

Received your letter some days ago, and am endeavoring to answer it to the best of my ability. Glad to say that I am in the best of health. You said you wished to know how I am getting along in this country and also how I like it. Well, I must truly say that I have not regretted the day I landed here. I came from Wales, and as a Welshman I am proud of being in Ontario, although I only came here in May, 1912. I must say that I am in the best part of Ontario as regards farming land. The land is rich and fertile, far superior to any part that I have seen in Wales. We also have far better farm houses and buildings, and everything is far more convenient. I am able to say this because I have lived all my life on a farm. Another great advantage is the telephone from farm to farm. In Wales they have no telephones, and it is certainly a great benefit to the farmers to have them. There is no wonder that England is proud of Canada, with its vast farming lands and lumber and all kinds of minerals, and with the only thing lacking—labour. I do not wish to run the Old Country down, but I only wish I had emigrated sooner. I hope to see more Welshmen coming here in the near future, and I cannot understand why so few come here from Wales. Try to hire for a year those that have spent their lives in farming. I should certainly advise any young person who wishes to get on in life and try Canada, for there is plenty of work and far better wages than in the Old Land.

DAVID FLANK.

Former address—Garth, Aberhapp, Newtown, Montgomeryshire, Wales.



Many Ontario farmers now drive automobiles.

Care H. WARD, CHURCHVILLE, ONT., Dec. 9, 1912.

I am very pleased to tell you that I like it here very much. I have just sent for my wife and family to come out and join me. I expect them about Christmas, and have got a good home for them to come to. There is plenty of work out here for those who will work and good wages. I get \$30 per month for the first three months, board, lodging, washing and mending included, and now I get \$25 per month for the winter, and my master will give me a big wage next spring. The work here is no harder than in the Old Country, but one gets much better pay. There is no going back to the Old Country for me. I only wish I had come out here some years ago. This is the place for those who wish to work, but it is no place for loafers.

THOMAS HILTON.

Care JOHN WILSON, JR., OAKVILLE, ONT., Nov., 1912.

It is a pleasure for me to tell you the advantages I have received that I could never have had in England. I am better in health and have gained in weight, which shows I am not overworked and better fed, and I also have a much more comfortable home. I could not wish for a better house. Last spring I saw an advertisement for emigrants for Canada, stating that they would receive assistance in transportation, and I applied, and am heartily glad that I did so. On arriving here I secured a situation at once, and received \$30 and board for summer months. After my wife and children came out I secured a position at \$30 per month, with cottage, orchard, garden, and one quart of milk per day. I also find a good master in Mr. Wilson, and he advanced me the money to bring my family out, also furnished the cottage for me. We also have fruit in abundance, which we would never have had in England. We find that the cost of living here is practically the same as in England, with a better assortment. I cannot speak too highly of my experiences in Canada. The climate is good and we have had very little frost here up to the end of November, and the crops have been very good. We all like it here very much. Were presented with a pair of chickens for Thanksgiving, with the promise of a goose for Christmas.

ANTHONY CHARLES HUNT.

Former address—Rose Cottage, Axmouth, Axminster, Devon, England.

TRAFALGAR, ONT., Dec., 1912.

I have the greatest pleasure in writing you a few lines to tell you I am in the best of health and spirits. Since being in Ontario I have been considering the advantages it has over the Old Country.

In the first place, in England I walked about for over nine months looking for work, whereas I landed in Canada and went to the Department of Agriculture, Bureau of Colonization, and they started me on a farm the next day.

Secondly, I was working in one of London's leading catering firms' stables for 14s. per week, without board or lodging. In this country I am getting nearly three times this amount, with board, lodging and everything found.

Now my advice to the young men in England is, make Canada your home without delay. Men are so scarce here (and women too) that they will pay almost any price even for inexperienced men who apply themselves,

and Great Britain and Ireland cannot meet the demand. I consider the best place for those who are willing and able to work is the farm. There is plenty of good fresh air, which every Englishman loves, and also plenty of good exercise. All I can say about Ontario is that it is a great Province, with the best of land.

WM. CROSWELL.

Late of London, England.

CARMUNSOCK, ONT., May 19, 1912.

I feel it my duty to write and tell you that I am quite satisfied with my situation which you provided me with. I find Mr. McNaught a good master, and willing to teach me anything on the farm. I couldn't have got a better home anywhere. I like the country and its ways well, but of course I have not been here long, but long enough to know it's the place for young strong men with determined minds to get on. I am also glad to say I have had better health here than in the Old Country. I have just hired for twelve months.

W. G. DIXON.

GRIMSBY BEACH, ONT., Dec. 1, 1912.

I now have pleasure in writing to tell you what a good place Ontario is and a few of the opportunities it offers over the Old Country. First, wages are double those at home, while you only have to work one half hour more than at home, and you are also treated as one of the family. There is no such thing as the men eating in the kitchen. You are also well looked after on your arrival here—met at the station and given a situation at once, and if you are not suited you are soon given another. Ploughs are lighter and wagons nearer the ground, and all tools are made for easiness on the men. Ontario is the finest place for good, hardworking farm hands in the world, and after men have been here a few years they often own their own farms. The climate of Ontario is mild, and I would gladly recommend it to anyone. Hoping this will induce others to come out, I remain,

T. DUNNISON.

Former address—Blackwell, near Darlington, County Durham, England.

Care A. G. SMILLIE, HENSALL, ONT., Nov. 30, 1912.

It is with the greatest pleasure I write you these few lines to let you know how I am getting on out here in Ontario.

I like it fine, and am getting on well. I have a splendid home here with Mr. Smillie.

I think Ontario is a fine agricultural country. Farming ways are very handy for the workingman in getting through with his work, more so than in the Old Land, and I have not to work any harder. Then the wages are double those received in the Old Land, and there is plenty of work for those wishing to work—in fact, the farmers cannot get help enough to work their farms, and any man who can work on a farm should have no hesitation in coming out here, for there are no finer people to work for.

JAMES DOHERTY.

DEER BANK FARM, CARMUNNOCK, ONT., Dec. 2, 1912.

Yours of November 29th to hand, and I will now try to explain what I think of Canada as I have found it up to the present time. I started out here on the 10th of April, 1912, and as you know, began at low wages on account of inexperience, but just double what I was getting in England. I have been offered work all around here for next summer, and I often think what a pity it is that there is not some society in Norfolk and Suffolk to advise and help young men to reach these shores. I have found Canada a land of plenty, and there is a living for everybody if they like to work, but the farmers around have been so disappointed in Englishmen that they don't care to apply to the office in Toronto for men. They complain of the fellows that have been fed with the silver spoon at home and turn up their noses at the least difficulty in their work. I think the farm work here is much lighter than at home and the land much better to work up, and am sure the boys of Suffolk would think it was play to do it, but I can quite understand why they don't come out. Plainly speaking, they are afraid, for the stories I heard about this country were enough to turn anyone's blood cold, but we were surprised to find everything contrary to what we heard. Clothes, for instance, are very little dearer in Ontario than in the Old Country, and speaking the truth, there is everything here that you could wish for. I hope that you will use this to the best advantage possible, and I shall be glad to answer any letters from the Old Country concerning the conditions here. ●

W. G. DIXON.



Spraying Potatoes.—“The horses do the work, not the men.”

LETTERS FROM SETTLERS

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NANTWR, ONT., Dec. 1, 1912

In answer to your favor of the 28th ult., I should like to say how greatly indebted I am to you for securing me such a good situation. I think that Ontario is a very fine agricultural Province, not only so, but it is a place I should advise any new arrival to come to, as there are so many opportunities for those who are willing to work. The agricultural advantages that this Province has over the Old Land are so many that it would take too long for me to write about them, and I should not hesitate to advise young men of England to come out at once while these opportunities exist. I cannot find words to express the good feelings I have for Canada.

THOS. E. FLENNY

Former address—Torre Yealampton, nr. Plymouth, Devon, England.

SHELBOURNE, ONT., Jan. 9, 1913

In answer to your letter received some time ago would say that I have been in Canada about ten months, and like it very well.

I am with Mr. Laidlaw, to whom you sent me, and get \$225 per annum and my washing done, which is twice as much as I could make in the Old Country, and I think I will be able to save \$200 this year, which I consider very good.

I like the people here very much and also the work, and I think young men are very foolish to stay in the Old Country when they might do so well here.

Thanking you for your interest in me, and hoping you will get others to come out, I am, etc.,

WM. FLATT

SEVENHAMPTON, ONT., Dec. 20, 1912

In reply to your letter asking for my impressions of Ontario, must say that I am getting along very well and like Ontario. It is a very healthy part of Canada, I think.

They farm much quicker here than at home, but more help is required. Before I thought of coming to Canada I was informed that it was overstocked with farm hands, but such is not the case. I can say from experience that Canada needs thousands of farm hands, and may say that I could have found places for six men right around where I worked. I was with Mr. Lemmex all summer, but he had not stock enough to keep me on through the winter, but I was engaged for the winter long before I left his place. Of course wages are not so good in the winter as in summer, but a man who can look after cattle can always command a higher wage than he would get in Scotland. Of course there are people who come out here from the towns and cities who don't want to work on farms, and they go back to the Old Land and run down Canada. This country requires men to work, and a man who is willing to work will get his value in regard to wages. I belong to the south of Scotland, County of Wigtonshire, and I can say that since I came to Canada I would not take a Scotch farmer's goodwill for his wages. If I can be of any assistance to any person intending to emigrate, by furnishing further particulars, I shall be only too glad to do so.

JAMES JOHNSTON

Former address—Balnesh, Glenlinc, Wigtonshire, Scotland.

218 DON MILLS RD., TODMORDEN, TORONTO, Dec. 25, 1912.

I landed here June 14th and began work June 18th, and have been employed steadily ever since here with Mr. Davies, Todmorden. I would not return to England under any consideration—that is to stay there. I find since coming to Canada that sober, willing and industrious men can get plenty of employment and good wages, and there is no question as to their future.

WM. GORDON.

Former address—Thurnly, nr. Leicester, England.

Care W. DIXON, WARREN P. O., NORTHERN ONTARIO, Dec. 2, 1912.

I am duly in receipt of your favor of the 29th ult., and in reply would say that owing to my limited experience any information that I could give you would carry little or no weight with it, and be of small value to those who are discontented with their lot in the Old Country, but who hesitate to leave it owing to their ignorance of the conditions existing in Canada. However, I have pleasure in giving you my impressions as far as my six months' experience is concerned.

I arrived at Quebec toward the end of May last, thence travelling by rail to Toronto, where I was met at the station by a representative of the Immigration Department, and I should here like to express my gratitude for the courtesy extended to me by the officials of the Immigration Department. I had not the slightest trouble in obtaining a situation—in fact, the demand for hired help on farms was far in excess of the number supplied both for experienced and inexperienced hands.

In this part of New Ontario the country affords great prospects (especially to those who have a little capital) to persons intending farming. The country is quite new and requires opening out and developing, and this is slowly but surely being done. The soil is virgin, is especially suitable for producing oats, barley, potatoes and hay. Cattle raising is also carried on to a large extent. Then, again, there is an abundance of thick bush, thus providing a large quantity of timber for building purposes and fuel, which is, of course, a great asset.

If a person comes here from the Old Country, with the strict intention of working hard and adopting Canadian methods, he or she will be assured of success, but to those individuals who hear stories of this country being the easy man's place and who purpose coming over on the strength of the nice things they have, I would advise them to dispel all such ideas, and if they are of modest means be prepared to accept the first offer that is made on arrival here. I find Canadian people to be very industrious and hard working, and it is only natural that they expect persons from the Old Country to be the same.

J. FAIRHURST.

Formerly of Cheetham, Manchester, England.

BOX 201, ST. CATHARINES, ONT., Dec. 8, 1912.

In reply to your letter of the 28th inst., asking for my opinion of Ontario in regard to agriculture, would say I consider from my experience both in Victoria County and in the Niagara Peninsula, that with land obtainable in the north at a small sum per acre, a man with a little capital or even without, providing he has "sand" can make good. I consider Ontario offers facilities unequalled in the Dominion or elsewhere both to the stockman and the farmer, and also to anyone wishing to start farming.

LOYD JONES.

Late of Burley Fields, Yorkshire, England.

Cape MARTIN WRAY, ELDERSHORE, ONT., Dec., 1912.

In the first place I think Ontario is about the best place to settle in, from an agricultural view. I think it has no equal. It has good markets, which are easily reached. It is suitable in the majority of places for market gardening, grain raising and dairy farming. As to the advantages over the Old Land, I may safely say it has a good many. The most noticeable is the high wages. Where is there a farmer in the Old Land who will pay a man £120 per year and provide board and rooms? I think any young man may safely come to Canada. Of course it is no use to come out here and expect to dig up the dollars. It is the place for the industrious man, and I can safely recommend it to anybody who is willing to work as a money-making country.

HENRY CHURCH.

Former address—Spring Vale, Milton, Weston-on-Mare, Somersetshire, Eng.

GALT, ONT., Dec. 15, 1912.

In answer to yours of Nov. 28th, I now write to let you know that I am getting on all right here. I like Ontario very much, it has a very healthy and invigorating climate and is a good country for agricultural pursuits. Has many advantages for men who are not afraid to work, especially so for the man with some capital. I can thoroughly recommend it to all who wish to emigrate and better themselves to give Ontario a trial. They can get steady work all the year around at good wages—nearly double what one received in the Old Country. I advise all who come to Canada to report at the Ontario Government Immigration Offices, where employment will be secured for them and where they will get all information they require.

WM. HEMMING.

Former address—Bloxham, Banbury, Oxfordshire, England.

Cape ARTHUR BROWN, R. R. 4 AYLMER W., Dec. 4, 1912.

It gives me the greatest pleasure to give you my impressions of conditions as I have found them in Canada, since I have already derived such benefit and such splendid health since my arrival here.

I came to Canada a complete novice to all things agricultural and fully expecting to be made great fun of by the folk who would be my new companions. Imagine my surprise when on arriving at my destination I was received by my future employer in the most cordial way imaginable, my total ignorance of farm duties being taken for granted and my lessons being given in the most patient way possible. Under such advantageous conditions one can master the primary principles of farm work in an incredible space of time, and the probation is thus made ever so much more pleasant.

Given an average intelligence and health, plus the very necessary determination to succeed in his ambitions, a young fellow's future is assured in the plainest of black and white, and he has only to exert himself a little and he can go further than his highest of high ambitions, as he will readily see after he has lived here a short time.

The climate is magnificent, and although this has been an exceptionally wet season for Canada, yet to me it has proved itself to be more enjoyable than the finest of summer weather I have experienced at home, but I think I am safe in saying that, as a rule, the climate of Canada is drier than that of the British Isles.

As I pen this the freeze-up is here, and soon I hope to be hearing the tinkle of sleigh bells ringing out over the snow and to be enjoying such a seasonable Christmas as will make an epoch in my life, being, as it is, the first I have spent in the freedom of this great New World.

I cannot imagine why I delayed so long in coming out now, and I most heartily advise all who are anticipating emigration, with perhaps some misgivings, to give it fair trial and harbour no anxiety as to the result. When I think of all these broad acres lying idle here and then revert to the awful poverty and slavery prevalent at home in our great cities, it makes me wonder at the ill-proportioned existing conditions in our great Empire.

Let me say that your organization is the most complete of its kind, and that a young fellow coming out here has his path clearly defined for him from the minute he sets foot on terra firma at the port of landing, until he starts in on his destined farm.

Thanking you for your kindness and the interest shown on my behalf, I remain, with best wishes for your work,

EDWIN F. COYLE.

Care JAMES DAVIS, Esq., SMELTER FARM, THOROLD, ONT., Dec. 8, 1912.

I like Ontario very much and could recommend it to any one thinking of emigrating, for there is plenty of work for farm hands and excellent wages. I am treated as one of the family, which makes a person feel at home. Any industrious man who is anxious and willing to work and do his best can in a few years make a comfortable home for himself. Of course the ways are different here in Ontario to what they are in the Old Country, and men must remember that Canadian farmers want their work done the Canadian way.

WILLIAM K. GRIMWOOD.

BEAVERTON, ONT., Jan. 6, 1913.

In answer to your letter, I take the liberty to write you a few lines. You have asked me for a statement of how I like this country. It was so wet a summer this year that I could hardly say very much good about it. Of course it has got an advantage over the Old Land in many ways. In the first place grain matures and ripens quicker, so harvesting, when the season is good, is got through much earlier; and the wages are much better. A good man can earn from \$300 to \$350 or \$360 per year with board and lodging. You ask me to write you a letter for circulation in the Old Country. I am not well enough qualified for that just yet.

JAMES ALBERT GILMORE.

Former address—Cornacrea, Kesh, Co. Fermanagh, Ireland.

THORNTON, ONT., Dec. 23, 1912.

I can truthfully say "Canada for a workingman," for he can get good wages if he is willing to work. From an agricultural standpoint it is all that can be desired. I came out here and left my wife and family behind, which I would never do again nor advise any man in the Home Land to do, as there are even better advantages for a good woman here than for a man. Men in the agricultural line will do much better than people from the cities, who cannot adapt themselves to country life.

JOHN DENNHEY

Care Mr. THOMSON, BETHUNVILLE, ONT., Dec. 1912.

I like Canada fine. I was farming in the Old Country for six or seven years, and I called it very hard work, and there was not much pay. So I am trying Ontario, Canada, and I am making more money in one week here than I would in the Old Country in three weeks, and I don't work so hard for it. After I had been out about three weeks I was very pleased with the work and pay. There is plenty of work and good pay in Ontario.

Geo. CRIMMAN.

Former address—Care Mr. Geo. Walker, Lansbury Park, Gosney Boodle, Cumberland, England.

PEEPABUN, GRAND VALLEY, ONT., Dec. 16, 1912.

I like the country very well indeed, and I am also getting on all right in it. No one need fear of being out of work around here, as there is a great demand for men at any time of the year. I think it is a great country, especially for young men—they can earn good money, there are no temptations for them, and a very great chance of becoming their own masters, if they care to look after themselves, in a very short time. There is no bullying, every one is on a level with his master, all work together and eat together, all start and finish at the same time. There is a little more work to do than in the Old Country, but you seem to get through it much easier, and I can truthfully say any one who is not afraid of work could not go to a better country in the world.

C. F. COOPER.

KIRKTON, ONT., Dec. 8, 1912.

I am getting on very well indeed, thanks to the Bureau of Colonization, which put me in such a comfortable home. I like this part of Ontario very much indeed. The crops are good and easily harvested, and the soil is soon prepared for the seed. Canada possesses this advantage over the Old Country, that no person able and willing to work on a farm need be out of employment for any length of time. In the Old Land thousands of unemployed stand around propping up buildings, but out here there are always lots of farmers willing to hire a man at wages per year that would seem like a small fortune to an Old Country hired man. In Canada the hired man is treated like one of the family, meals at the same table as his boss, sleeps upstairs in the same house, and in every way is made as comfortable as possible. There is a mistake generally made in the Old Country. People there imagine Canada to be a land devoted chiefly to the raising of wheat and with scarcely any houses close together in the country. This is not the case in Ontario, as farmers here do mixed farming and raise a lot of stock, and there are farm houses situated all over within a half mile of one another. These farmers live a kind of free and easy life, with parties in the summer and house parties in the winter, to which everybody for miles around is invited, so that life on a farm is a real pleasure. I can recommend farming in Ontario to any one doubtful as to whether it is a paying and a profitable business.

J. S. CHASE.

Former address—21 Strand, L. Derry.

Care J. J. MILLIGAN, LAMBTON MILLS, ONT., Jan., 1913.

In answer to your letter, I wish to thank you very much for the kindness shown me since I arrived in Canada on April 3rd, 1912, and I am pleased to say I am still in the same situation you sent me to the day I arrived in Toronto, and I am more than satisfied with it. I also like Canada very much and often wish I had emigrated five or six years ago. From an agricultural standpoint I think Ontario far ahead of the Old Land, as the soil is much richer and the climate better, and I hope to be able to get a piece of land myself before long, as I think there are heaps of openings for market gardeners and florists, and it will give me the greatest of pleasure to recommend it to all my friends. I hope this letter will be of use for publication for the benefit of others who desire to emigrate.

GEO. BELTON.

Former address—River Lane, Fetcham, nr. Leatherhead, Surrey, England.

Care MR. A. W. PALMER, DOUGLAS, ONT., Dec., 1912.

In answer to your letter, I have much pleasure in giving you my opinion of Ontario, and hope it will come to the notice of some Old Country boys who are anxious to get on in life. I did not go to Mr. Riddell—where you directed me—as he had hired a man, but found work an hour afterwards in my present position. When I came to Canada I was on the lookout for hard work, but have got an easier job than I had in England and more than double the wages. I can only say that Ontario has far exceeded my expectations, and I am sure if it were more widely known what a place of opportunity this country is for the one who is willing to get on, there would be a greater increase in emigration. I should be glad if you would forward me particulars regarding the 160 acres of land if free or otherwise as I am anxious to take up land for myself.

H. G. BARNES.

Formerly—1 Rose Villa, Southwood Rd., Rusthall, Tunbridge Wells, Kent, England.

NORWICH, ONT., Dec. 31, 1912.

We like the country very much indeed, and find a great advantage over the Old Country. There is plenty of work for anyone that is willing to do it. The land in this district is very good, some excellent crops being raised, and one with a little capital could easily start farming. I have had the chance twice since coming here. We are very pleased we came out, for our health has never been better than it is at present. The weather is colder than it is in England, but the air is clearer, so one does not feel the cold so much, in fact we don't mind it in the least.

JOHN AND ROSE BARKER.

Former address—Northampton.

BERLIN, ONT., Dec. 29, 1912.

I would like to say I am greatly pleased with the prospects in Ontario, and would certainly recommend anyone who is willing to work hard to come out here.

The wages are considerably higher than in the Old Country, and although for a time one may have to rough it, yet there are abundant opportunities for success in all trades.

I would say, however, to anyone thinking of going in for farm work—make an engagement for twelve months with the farmer you go to, otherwise the farmer will not want you for the winter, as there is hardly anything to do, and very few farmers engage a man for the winter alone, as they could only afford to give him board and lodging and no wages. But if he engages a man for a year he is bound to keep him all winter, and he gets a definite rate of pay for the whole year. For anyone who has had any experience at farm work in England, the Government give 150 acres of land free, providing the person gets it under cultivation in three years and lives on it half the year.

The agricultural position of this Province is exceptionally fine, and the sort to produce good crops and healthy cattle.

As to general conditions, there are good schools, both elementary and technical, plenty of churches of all denominations, and everyone is free to believe what he chooses. There is plenty of money and certain success for those who will work hard for a little while.

A. S. BINKS.

Care Mr. J. TAYLOR, ROCKWOOD, ONT., Jan. 1, 1913.

Your letter to hand, and I have much pleasure in answering same.

Farmers in Canada can get through more work in one week than they can in the Old Country in two, because they have more and different kinds of implements. There is a good chance in Canada for immigrants to get on. I can tell you from my own experience I have been working with the farmers the past fifteen years in the Isle of Man, and I never got any more than £10 per year, or otherwise \$25, and worked just as hard for it as I have here, and there are hundreds the same. I am not a first-class man, but I get as much money here as the best of farm men could get in the Isle of Man. I also get better food. If young men in the Island only knew the difference I think they would leave and come here. This is my opinion of Canada, and I would be glad to give it to young men in the Isle of Man who doubtless would be glad to get it.

H. W. BISHOP.

Formerly—Isle of Man.

Care A. D. RUTHERFORD, CAMPBELL'S CROSS, ONT., Jan. 15, 1913.

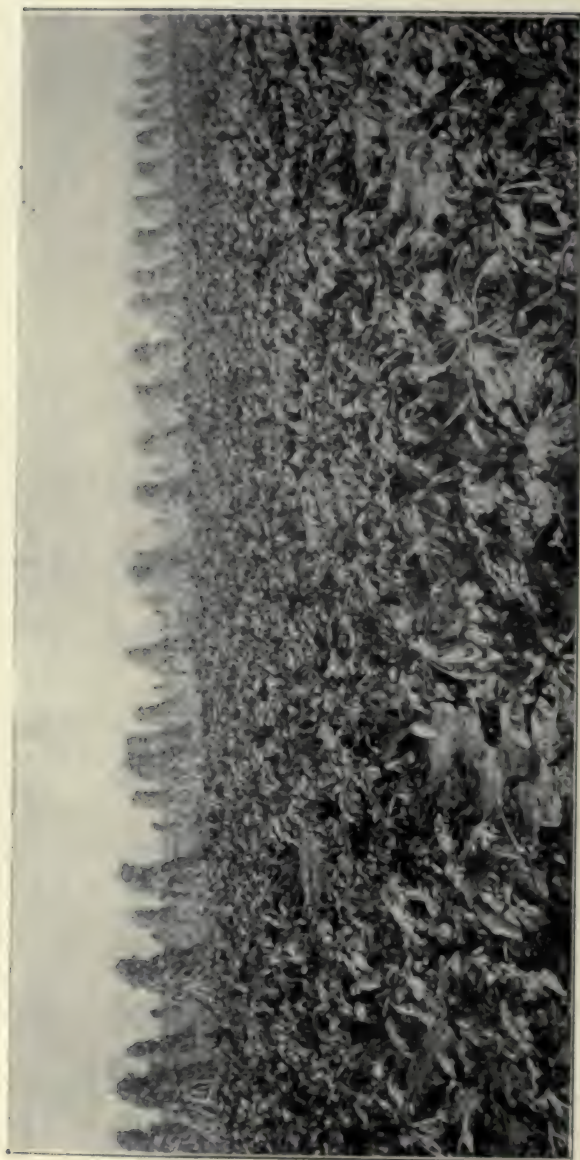
I am pleased to say I am getting along fine and like the country very much indeed. In regard to the advantages Ontario has over the Old Country would say that I think the chances of advancement in this country are much better than in England for any man who is anxious and willing to work. In England one must just continue paying rent for his farm, here one can own the farm in a few years. I am recommending Ontario to all my friends.

E. H. GATES.

Former address—Rose Cottage, Arnewood, Sway, nr. Brockenhurst, Eng.

Care Mr. C. ARGUE, CARP, ONT., Dec. 15, 1912.

Just a line in answer to your kind letter, which I was pleased to receive, and to tell you what I think of Canada. Well, to begin with, I received every kindness and assistance to get work when I arrived here. The M. P. of this district, whom I happened to come across in the village, came with me and introduced me to the farmer I am now working for. I have been



Two of Ontario's splendid field crops—Indian Corn and Mangels.

here six months now, and can say that I have not had to work any harder here than I did on any farm in the Old Country, and I worked for four or five different farmers there. I think it is a good thing for a young fellow to come out here if he has no home ties, as you get better pay, and if it is the same all over Canada as it is in Cury, there is nowhere to spend it. My chum, who is out at Rindarn, and was never on a farm before, likes it very much. I am getting \$20 a month here for the winter if I care to stay.

HENRY ASHBY.

Former address—Heywood St., Brimington, Chesterfield, Derbyshire, Eng.

CARE MR. R. STEEN, CHATHAM, ONT., JAN., 1911.

I am very pleased I got with very good people. They are treating me very well, and the food is excellent. I expected to find the work a bit hard at first, which I did, of course; but I am now finding it easier. I haven't that if a lad is willing to learn the work the farmers are only too pleased to teach him. I like Ontario. The climate of Ontario, I think, is the best a farmer could wish for. I do not think people need to go to the West or to Australia. I know that they will find all that they need in Ontario. I have got a good name in the neighbourhood, and the farmers are asking me if I could get any more lads from England like myself. I tell them to write to you, and you will get all the lads they want. Chatham is in great need of them. If there is any lad willing to work, Ontario is the place for him.

P. W. CROWE.

DOLLAR, ONT., DEC. 25, 1912.

I have been out here a few months and like the country very well, also the people that I have worked for—they are very kind.

This part of Ontario is splendid for dairy farming, because there is plenty of water, some farms having small streams running through them. Off most of the farms you can get good crops of turnips and mangolds, and that is what is most wanted on a dairy farm. You can get a good crop of hay off a field, and then plough it and have a crop of buckwheat the same season. The buckwheat is good for feeding fowls. Barley, wheat and oats are grown extensively. Some of the land is light and sandy, while other land is more heavy. The pastures are very good for rearing young cattle. Most of the farms have good homesteads and good accommodation for the housing of grain. The barns are good and all the water is inside, so that you have not to go out in winter for anything.

J. W. BLACKSTOCK.

Former address—10 Temple St., Shells, Blaydon-on-Tyne, Co. Durham, Eng.

AGINCOURT, ONT., DEC., 1912.

Just a few lines to thank you for what you have done for me. I like Ontario very much, it is a fine agricultural country, and there is lots of work for those who are anxious to work. The ways are a little different from those in the Old Country, but you soon get used to them. The wages here are much better than at home, and I have no desire to go back to England. The people treat me as if I was related to them.

E. T. BOST.

Late of Thembourne, King's Lynn, Norfolk, England.

Jan. 4, 1913.

I am getting along all right since I came out here. It is a fine country for any young man that wants to work, also they have a fine way of farming here. It is a great deal better than the Old Country for young men, even in saving money, and many other things. I have been writing to many other friends in County Antrim. There are a good many young men coming out through my letters that I don't think would come at all. I recommend the country to all young men that I have been writing to, and I can say that they have a great deal more opportunities here than they have at home. I would not like to go home to farm in the Old Country any more. It is a lot easier work here than it is in the Old Country. They have good implements for working their land here. A man working for a few years could easily make a home for himself. A man that idles is no good here, he would be better to stay at home. Plenty of people come out here that can't work at all, and then they go home and give this country a bad name. But I could tell them a different story. I recommend this country to any young man.

N. BOYLE.

GORING P. O., ONT., Jan. 14, 1913.

In reply to your letter of the 19th inst. I am pleased to say in the first place that there is plenty of work and good wages in Ontario for the man who is willing to work. The wages for an experienced man in this neighborhood are \$30 per month and board, and more if one is worth it, and the living is good. Farming here is altogether different to what it is in England. The best farmer in England would be lost in Canada and the best farmer here would be no good in England. A man must come here and be willing to learn by degrees the ways and the methods. The Canadian farmer has to get the work done, and he is quite willing to teach one, and will help in every way provided the man is willing to try to learn. I brought a wife and three children out here, and after two or three months I had a pig and twenty-four hens of my own. I was a gentleman's gardener all my life in the Old Country; in fact I am a professional gardener, and would like to get a position at my trade. If any one in the Old Country would like to write to me for information I shall be pleased to find the right men places around here.

D. BRAINE.

Former address—Biddeston, Chippenham, Wiltshire, England.

Moscow, ONT., Dec., 1912.

I am just sending a few lines in answer to your kind and welcome letter, but I cannot yet recommend it to any of my friends, because it has been an awful hard year for us, and if we hadn't had some good, kind friends who have helped us as much as they could, we would not have been as well off as we are now. I think after we have been here for a year or more and get better acquainted with the people and know more of their ways, we shall be able to recommend it. We like Canada better than England, and are getting to like their ways; they seem easier than they do in England. If I find that I want any assistance I will write and let you know.

E. CROSS.

BRACEBRIDGE, ONT., Dec. 5, 1912.

I must thank you for your kindness in getting me a situation on a farm, and must say I was treated with every kindness by my employer during my stay of seven months. Considering I had never been at farm work before, I got on exceedingly well at everything connected with it, and not only like it, but learned a good deal which will be valuable later on. You get better pay than in the Old Land and can save, and in this way I have been able to get a home of my own, a thing I despaired of ever having in England, and a large garden to grow vegetables in, not a back yard. The climate is very good and everything grows wonderfully well here. I would certainly advise others to come to Ontario and make their home, instead of snapping an existence in a land like England, which is too full of the unemployed and miserable.

WILLIAM HENRY BRADY.

Late of 91 Fellows Rd., Swiss Cottage, London, N.W., England.

CARE ALEX. JOHNSTON, R. F. D., No. 1, HATCHLEY, ONT., Dec. 5, 1912.

In reply to your kind letter of inquiry as to my welfare, would say I am getting along very nicely and am very comfortable with Mr. Johnston, and my wife and little girl are also quite happy and contented. We have a nice cottage to live in, far superior to the cottage that falls to the lot of the average farm laborer in the Old Country. We like Ontario and consider it a good country for any one who wants work and is willing to work, and I think that there is more chance for a man to succeed in getting a home and farm for himself here than in the Old Country. I was offered several positions as soon as I jumped off the train at Toronto, but, wisely I think, went straight to your Bureau opposite the station and presented your cards of introduction, and your Mr. Tutt soon had me fixed up with Mr. Johnston. My wife had plenty of work during the summer picking strawberries, raspberries, etc., and made about thirty dollars at this. If you think this letter will be the means of persuading more to emigrate to Ontario you are at liberty to publish it in your literature for circulation in Great Britain, and I don't care who it persuades, I am sure they will never regret it. I only wish we had come some years ago. I thank you for your kind offer of information and assistance, and can assure you that I will not neglect to keep in touch with you.

GEO. BARRAS.

Former address—The Heath Poultry Farm, East Stoke, nr. Wareham, Dorset, England.

BOTTER MOIRA, CO. DOWN, IRELAND, June 23, 1913.

I don't know what was the reason I came home. I liked Mr. Norris well. I am awfully sorry that I came home from so good people as they are. But I suppose there is lots of work out there yet. I would go if you could clear my passage out. I would be only too glad to pay you back when I would get there. It's no good being here. I like Canada best of all.

JOSEPH H. RANSOM.

CLARKSON, ONT., Jan. 8, 1913.

In answer to your letter of the 20th Dec., I beg to say that I am doing well, and am very glad that I left England and came to Canada. I have more money saved now than I saved all my life before. I have a good place and have received the kindest of treatment from my employer and his family. Judging from my own experience the workingman in Canada gets better treatment, better wages, and has infinitely better prospects for the future than he has in England, assuming that he is not afraid of work. The climate so far has been very pleasant—neither too hot nor too cold. I have no hesitation in recommending English farm laborers to come to Canada, confident that if they do so they will never regret it.

ERNEST COLLINGWOOD.

Former address—Old Leake, nr. Boston, Lincoln, England.

Care THOS. L. LESLIE, NORVAL STATION, ONT., Dec. 1, 1912.

I have your letter, which I was very pleased to receive. I am also very pleased to tell you that I have found a very good home and a good master, and up to the present I am getting along wonderfully well. I have had good health, and I must just say that this country is ahead of England both in work and money, and if a man has a grain of sense he can get on well here—that is if he will work. If I continue as well as I am doing now I intend to stay with Mr. Leslie a few years, and then I shall have a few dollars and will be able to get along very well, and hope when I do leave him that he will get a real good man, as I am sure he knows how to treat men well.

I have a good house, milk, firewood and plenty of other little comforts. My wife also likes it here and would not go back to England for all the world. We often wish we had come out three or four years earlier. Farming is much easier here and the horses do the work, not the men. I hope that good working people will keep on making their way out here, as I think they could not do a better thing.

JOSEPH CLARK.

Care W. D. ROBERTSON, OAKVILLE, ONT., Jan. 5, 1913.

In answer to your letter as to how we are getting on in Ontario, I am glad to say I like the country very well, and am getting along splendidly. I have enjoyed good health until a short time ago, when I was kicked by a horse and had three of my ribs broken. From an agricultural standpoint, Ontario is a wonderful country for growing all kinds of fruit and grain. I think the prospects are better here than in England for the workingman. My wife alone earns more money weekly here than I got in the Old Country, and we wish we had come out years ago. We find the distance to the school the worst part, as the children have to walk two miles and the roads are very bad. I think the schools should be a little nearer to each other. I have recommended Ontario to all my friends, and we expect that some of them will come out in the spring. I thank you for assisting me to come out, as I think I shall have a much better chance to make a home for myself and the prospects are much better for the children.

JOHN COOPER.

Former address—Sandbeck Lodge, Maltby, Rotherham, Yorkshire, England.

MYRTLE SEASON, ONT.

I like Ontario very much; so does my wife. We think it is a very healthy place, and mean to stay here. I consider anyone coming out here has got a far better chance to get along than in the Old Country. They can earn double the wages, and if they are interested in farming and stick to it, they can be their own master in a few years.

W. A. DAVIES.

HAMMILL'S, ONT., JAN., 1912.

I think that Ontario is not a bad place to live in if a man is willing to work and learn the methods here, as they are different from those in England. I think if a man is steady he can soon get on to his feet, as the wages are good and expenses are not high if you live in the country. I am glad to say that we are all keeping good health and doing well so far, and I can recommend Ontario as a good place for those who are willing to work, as the farmers are short of help and there are lots of good openings out here.

A. W. HAMMILL.

Former address—17 Ida Terrace, Stourton, Leeds, Yorkshire, England.

ELDER'S MILLS, ONT., DEC. 7, 1912.

My husband wishes me to tell you that he thinks he has hardly been here long enough to tell you exactly how he likes the country, but says he will be quite willing to write you a letter later on. For my part, I think it is far before England, except that none of our friends are here.

E. V. DEAKES.

DOUGLAS, ONT., DEC. 30, 1912.

I am very pleased to say that I am keeping in the best of health and I like this country very much. There is plenty of work to be had. The country is going ahead in butter and cheese making, and it is a great fruit-growing country, and wages are better, which is the most important. Would you kindly oblige me by telling me all about a homestead and how to get one, because I think of taking one later on.

E. JENNER.

CARP J. C. HUNTER, DARTFORTH, ONT., DEC., 1912.

I now take pleasure in answering your letter and shall be only too pleased to recommend any of my friends in England to come to Canada. I am pleased to know that I have bettered myself in coming to Canada and have saved more money in seven months than I could in England in three years, and have not had to work so many hours for it. From an agricultural standpoint I think the Canadians have far the simplest way of working the land, and the land itself is much better to work.

J. DRAKE.

Former address—Bowden, nr. Sherborne, Dorset, England.

LAMBERTS P. O., MILVERTON, ONT., Dec. 2, 1912.

In regard to your letter which I received the 29th ult., I am pleased to say that this is a fine country and the people are very sociable, and a stranger is treated as one of themselves. Although an Englishman, I prefer the Canadian people to my own people. From an agricultural point of view would say that this country is worked on the same principle as the Old Country, but I think they are more up to date in machinery, for I have seen more in this country than in the old. As for recommending any one to come here, I am sure one could not do better than to come to Ontario. I have got along splendidly and the wages are very much better than in England—in fact, one gets about double the wages here.

A. E. JONES.

Former address—8 St. George's Terrace, Kidderminster, England.



An Ontario farm home where it is not all work.

ACQUIRING A TITLE TO PUBLIC LANDS.

Public Lands may be acquired in any of the eight Districts of Nipissing, Timiskaming, Sudbury, Algoma, Thunder Bay, Rainy River, Kenora and Patricia, comprising New or Northern Ontario, and in Parry Sound, Muskoka, Haliburton and the Counties of Peterborough, Renfrew and Hastings in Old Ontario.

The Districts are divided into agencies in charge of a Land Agent, whose duty is to give information, receive applications, and supply forms of affidavits.

Agricultural lands open for disposal may be obtained—

- (1) BY PURCHASE.
- (2) BY FREE GRANT.

Townships for Sale in Ontario.

Quantity and Terms.

The townships open for sale are subdivided into lots of 320 acres, or sections of 640 acres, and according to the regulations now in force a half lot or quarter section of 160 acres, more or less, is allowed to each applicant. The price is 50 cents an acre, payable one-fourth cash, and the balance in three annual instalments with interest at 6 per cent.

The applicant must be a male (or *sole female*) head of a family, or a single man over 18 years of age.

The sale is subject to the following conditions: The purchaser must go into actual and *bona fide* residence within six months from date of purchase, erect a habitable house at least 16 x 20 feet, clear and cultivate at least 10 per cent. of the area of the land, and reside thereon for three years, for not less than six months in each year.

The intending purchaser should make application to the Crown Lands Agent in charge of the township in which the land is situated, and file the affidavit required, which will be sent to the Department. If the land is vacant and open for sale the applicant must, upon notice from the Agent, pay the first instalment of the purchase money within thirty days, for which the Agent will give him a receipt. The applicant has then authority to go into possession and commence the settlement duties.

Applications are not received for any public lands until they are laid out into townships, surveyed into lots and concessions, and formally opened for sale by Order-in-Council. Lands that are

reported to be valuable chiefly for mines, minerals or timber, are also withheld from sale for agricultural purposes.

Nearly all the lands now open for sale are *subject to timber license*, which authorizes the holder of the license to cut pine and other kinds of timber. After a lot has been regularly sold, however, it drops from the license all kinds of timber except pine, and the purchaser has the right to cut and use such pine trees as may be necessary for building or fencing on his land, and may also cut and dispose of all trees that he requires to remove in the actual process of clearing the land for cultivation. The pine trees so cut and disposed of are subject to the ordinary timber dues. Although the timber other than pine is dropped from timber license, after a sale of the land is carried out, the purchaser is not entitled to cut and dispose of any kind of timber until he has gone into actual *bona fide residence* on the land, resided thereon continuously for six months, built a habitable house 16 x 20 feet, and cleared and put under cultivation two acres at least.

In certain sections settlement duties by proxy are permitted, but the requirements as regards clearance, improvements, etc., are practically double those called for in ordinary cases.

At the expiry of three years from the date of sale, and upon payment in full of the purchase money and interest and proof of the completion of the settlement duties required by the regulations, the purchaser is entitled to a patent for his land.

Lands which are thus open for sale are in the districts of Nipissing, Sudbury, Algoma, Rainy River, and Timiskaming.

Free Grants and Homesteads.

Public lands which have been surveyed and are considered suitable for settlement and cultivation, and not valuable chiefly for minerals or pine timber, may be appropriated as *Free Grants*; and such lands may be located in any of the Districts above mentioned, except Timiskaming and Patricia.

Although no fees are charged by the Department, or allowed to the land agents for locating, yet, if required to prepare the necessary affidavits, the Agent may make a reasonable charge for so doing.

Who may Locate and the Quantity.

Generally speaking, all the lands lying north of the Mattawa and as far west as Manitoba are surveyed into townships, subdivided into sections and quarter sections, or into lots of 160 or 320 acres each, and the locatee, whether he be a single man over eighteen, or

the head of a family with children, is entitled to 160 acres only; that is, a full quarter section, or a half lot, as the case may be; and if the locatee be a married man having children he may purchase an additional area of 80 acres at 50c. an acre cash.

The townships opened for disposition in Old Ontario are divided into 100 acre lots, a married man with children or female head of a family being entitled to 200 acres free, with the right to buy an additional lot of 100 acres at 50c. an acre cash. A single man or married man without any children may locate 100 acres and may obtain an allowance for rock and swamp up to, but not exceeding, 100 acres.

As soon as advised by the agent that his location has been carried out, the locatee may occupy his land and commence improvements, which he must do within one month from date of location.

Conditions of Location.

The duties entitling the locatee to his patent are as follows:

(a) At least 15 acres to be cleared and under cultivation, of which 2 acres, at least, are to be cleared and cultivated annually during the 3 years.

(b) A habitable house to be built at least 16 x 20 feet in size.

(c) Actual and continuous residence upon and cultivation of the land for 3 years after location, and thence to the issue of the patent.

A locatee is not bound to remain on the land all the 3 years; if obliged to work out, or has other good cause, he may be absent for not more than 6 months altogether in any one year. He must, however, make it his home, and clear and cultivate the quantity of land required (two acres, at least) each year.

Forfeiture.

In case the locatee fails to perform the settlement duties required by law, his location is liable to forfeiture, and may be cancelled by the order of the Minister. Applications for cancellation must be made through the local agent, and supported by the affidavits of the applicant and at least two credible witnesses who will show what the present position of the lot is; whether the locatee ever occupied or improved, and, if so, to what extent, and the value of the improvements; when he ceased to occupy; and his address, if known. Upon receipt of this evidence the agent will, if he can ascertain the address of the locatee, notify him of the application, and call upon him to answer the allegations, or show cause why his location should not be

cancelled, within fifteen days. At the expiration of that time the agent will transmit the evidence, with anything he may have received from the locatee in reply, and his own report, to the Department. (See Form No. 8.)

The assignment or mortgage of a homestead from a locatee to another person before the issue of his patent is invalid, except where the consent in writing of the Minister is secured. This does not, however, apply to the devise of a Free Grant lot by will, nor to transfers of land by a locatee for church, cemetery or school purposes, or the right of way of railroads.

Reservations

In case the lands in a Township or portion of a Township which are not under a license to cut timber are brought under the operation of Part II of The Public Lands Act, after the 6th May, 1913, the Minister of Lands, Forests and Mines may, after inspection and report under authority of an Order-in-Council, open such lands for location to actual settlers without reservation of the pine trees, mines and minerals, and the patent when issued for such land shall expressly grant the pine trees and mines and minerals, but the locatee shall not be entitled to cut and dispose of the pine trees except for building, fencing, fuel and in course of clearing, until he shall have been six months in actual residence with a house 16 x 20 feet erected, and have six acres cleared.

In case, however, where land has been patented as Free Grant Land, and the mines and minerals have not been staked out or granted prior to the 6th May, 1913, the reservation of such mines and minerals is now by law rescinded and they belong to the owner of the soil. Where the land is located or sold as Free Grant land the patent when issued shall include the mines and minerals, and unless they are expressly reserved shall be deemed to have passed to the patentee.

The timber regulations are similar to those under "Townships for Sale."

LANDS WHICH ARE OPEN FOR SALE.

District of Timiskaming.

New Liskeard Agency. Agent, J. W. Bolger.

This agency contains seventeen townships, situated north and west of Lake Timiskaming. The agent resides at New Liskeard in the Township of Dymond, at the head of the north-west bay of the lake. It is reached at present by the Timiskaming and Northern Ontario Railway from North Bay, about 112 miles.

Townships:

Bucke.	Camp.	Hilliard.
Firstbrook.	Harley.	Armstrong.
Harris.	Kenna.	Beauchamp.
Dymond.	Herwood.	Byrne.
Hudson.	Cane.	Talbot.
Lundy.	Hytham.	

Englehart Agency. Agent, Joseph Woolfing.

This agency contains nineteen townships, situated north of the New Liskeard Agency. The agent resides at Englehart, in the township of Evanturel. Englehart is a station on the Timiskaming and Northern Ontario Railway, about thirty miles north of New Liskeard.

Townships:

Pense.	Chamberlain.	Blain.
Ingram.	Savard.	Gruet.
Evanturel.	Sharpe.	Otto.
Dack.	Davidson.	Ely.
Kobillard.	Catherine.	Bart.
Truax.	Pacaud.	
Marter.	Marquis.	

Matheson Agency. Agent, F. E. Ginn.

This agency contains seventeen townships situated north of the height of land about eighty-seven miles from New Liskeard. The agent resides at Matheson, formerly known as McDougall's Chute, a Station on the Timiskaming and Northern Ontario Railway.

Townships:

Beatty.	Clergue.	McCaig.
Bond.	Carr.	Pt. Playfair.
Bowman.	German.	Stock.
Benoit.	Hyslop.	Taylor.
Calvert (part).	Mauetjoy.	Walker.
Currie.	Matheson.	

Cochrane Agency. Agent, S. J. Dempsey.

This agency contains twelve townships situated north of the height of land about forty-seven miles from Matheson.

The agent resides at Cochrane, the junction of Grand Trunk Pacific and Timiskaming and Northern Ontario Railways.

Townships:

Blount.	Colquhoun.	Kennedy (part).
Brower.	Fournier.	Lamarche.
Calder.	Fox.	Lench.
Cute.	Glackmeyer.	Pyne.

District of Nipissing.

North Bay Agency. Agent, W. J. Parsons.

This agency contains one Sale Township—Widdifield, and three Free Grant Townships—Bonfield, Ferris, Chisholm.

District of Sudbury

Warren Agency. Agent, Emile Langlois.

This agency is situated in the Township of Dunnett, on the line of the C.P.Ry., about 20 miles west of Sturgeon Falls, and contains 9 townships, two of which—Hugel and Loudon—are open for sale at the rate of 50 cents an acre, subject to the usual settlement conditions, and the other townships are open for location under The Free Grants and Homesteads Act.

Sudbury Agency. Agent, James K. MacLennan.

Sudbury is a station on the C.P.Ry. There are eight townships now on the market. The Townships of Dowling and McKim are open for sale at the rate of 50 cents an acre subject to the usual conditions regarding settlement duties. The other six townships are open for location under the Free Grants and Homesteads Act.

Massey Station Agency. Agent, R. J. Byers.

This agency is situated in the Township of Salter on the Sault branch on the C.P.Ry., and contains five townships, which are Hallam, May, Salter, Shedden and Victoria.

District of Algoma

Thessalon Agency. Agent, Thomas Buchanan.

Thessalon is a village situated in the Township of Thessalon, and is reached by the Georgian Bay steamers from Owen Sound or Collingwood in summer, and also by the Grand Trunk Railway to North Bay and thence by the Algoma branch to the Canadian Pacific Railway to Thessalon.

Townships:

Bright.
Day.
Gladstone.
Haughton.

Johnson.
Kirkwood.
Parkinson.
Patton.

Rose.
Striker.
Tarbutt.
Thompson.
Wells.

Hearst Agency. Agent, Thos. V. Anderson.

Kendall and Casgrain, in District of Algoma, on Transcontinental Ry. about 130 miles from Cochrane. Reported to contain a large percentage of good land suitable for agricultural purposes. Town plot of Hearst is situated in township of Kendall, and Casgrain lies immediately to the north of Kendall, the south part of which is close to the railway.

District of Rainy River.**Fort Frances Agency. Agent, C. J. Hollands.**

There are three townships in this Agency, and they are crossed by the line of the Canadian Northern Railway which runs from Port Arthur west. The Townships are:

Farrington.

Halkirk.

Watten.

LANDS OPEN FOR LOCATION AS FREE GRANTS.

Since the passing of the Free Grants and Homesteads Act, 235 townships have been opened for location to actual settlers. These townships are divided into 27 Agencies. The following is a list of the Agencies with the names of the officers in charge, the names of the townships in each, and the means of access.

Muskoka Agency. Agent, J. B. Brown, Bracebridge.

This Agency contains 21 townships. The Grand Trunk Railway runs through the District from south to north, and brings it within easy access to the markets of the front. Bracebridge, the seat of the Crown Lands Agency, is about 122 miles from Toronto; is the chief town of the District, and has also the Judicial, Registrar's and Sheriff's offices.

Townships:

Baxter
Brunel
Cardwell
Chaffey
Draper
Franklin
Macaulay.

Medora
Monek
Morrison
Muskoka
McLean
Oakley
Ridout.

Ryle
Simlaire
St. Clement
Stephenson
Sutton
Watt
Wood.

Parry Sound Agency. Agent, F. R. Powell, Parry Sound.

This Agency contains sixteen townships in the south-western part of the District. It may be reached from the front by the Canadian Northern and Grand Trunk Railways. Parry Sound

contains the offices of the Stipendiary Magistrate, Sheriff, Local Master of the District, and Mining Recorder.

Townships:

Burpee.	Foley.	McDougall.
Carling.	Hagerman.	MacKenzie.
Christie.	Humphrey.	Monteith.
Conger.	McConkey.	Shawanaga.
Cowper.	McKellar.	Wilson.
Ferguson.		

Magnetawan Agency. Agent, Dr. J. S. Freeborn, Magnetawan.

This agency contains eleven townships, in the centre of the north-west part of the District of Parry Sound. Magnetawan is situated on the Rosseau and Nipissing Road in the Township of Chapman, 14 miles from Burk's Falls, a station on the Grand Trunk Railway. A steamer runs from Burk's Falls to Magnetawan in summer, and a stage in the winter.

Townships:

Chapman.	Lount.	Ryerson.
Croft.	Machar.	Strong.
Ferrie.	Mills.	Spence.
Gurd.	Pringle.	

East Parry Sound Agency. Agent, William Jenkin, Emsdale.

This Agency contains six townships, in the south-eastern part of the District. Emsdale, in the Township of Perry, is a station on the Grand Trunk Railway, which runs through the Townships of Perry and Armour. The Canada Atlantic branch runs through the Townships of Bethune and Perry, and connects with the Northern Branch at Scotia.

Townships:

Armour.	Perry.	Proudfoot.
Bethune.	Joly.	McMurrich.

Nipissing Agency. Agent, H. J. Ellis, Powassan.

This Agency comprises five townships, south of Lake Nipissing, and in the north-east part of the District of Parry Sound. The route from Toronto is by the Grand Trunk Railway to Powassan. From the east by the Canadian Pacific Railway to Callendar, and thence by the Grand Trunk Railway to Powassan.

Townships:

Hardy.	Laurier.	Patterson.
Himsworth.	Nipissing.	

District of Nipissing**North Bay Agency. Agent, W. J. Parsons, North Bay.**

There are four townships in this agency open for location under the Free Grants and Homesteads Act.

Townships:

Bonfield.
Chisholm.

Ferris.

Part of Bonker.

Mattawa Agency. Agent, Robt. Small, Mattawa.

This Agency contains five townships—three of which are traversed by the Canadian Pacific Railway. The route from the south is by the Grand Trunk Railway, and from the east by the Canadian Pacific.

Townships:

Calvin.
Mattawan.Papineau.
Part of Cameron.

Part of Lauder.

Sturgeon Falls Agency. Agent, J. A. Philion, Sturgeon Falls.

This Agency contains six townships situated along or convenient to the line of the Canadian Pacific Railway—west of North Bay.

Townships:

Cosby.
Caldwell.Grant.
Martland.McPherson.
Springer.**District of Sudbury.****Warren Agency. Agent, Emile Langlois, Warren.**

This Agency is situated in the Township of Dunnet on the line of the C. P. Ry., about 20 miles west of Sturgeon Falls, and contains 7 townships which are open for location under the Free Grants and Homesteads Act.

Townships:

Appley.
Casimir.
Dunnet.Hagar.
Jennings.
Kirkpatrick.

Ratter.

Sudbury Agency. Agent, James K. MacLennan, Sudbury.

There are eight townships open for location as Free Grants in this agency.

Townships:

Broder.
Balfour.
Dill (part).Chapman.
Garson.
Morgan (part).Neelum.
Raybide.

Blezard Valley Agency. Agent, J. A. Lemieux, Blezard Valley.

This agency is situated in the Township of Blezard, north of Sudbury, and contains four townships.

Townships:

Blezard.	Capreol (west part).	Hammer.
		Lumsden (part).

Espanola Station Agency. Agent, Neil Mulvaney.

This Agency is situated in the Township of Baldwin, and contains three Townships—Nairn, open for sale, and parts of Merritt and Baldwin, open as Free Grants.

District of Algoma.

Thessalon Agency. Agent, Thos. Buchanan, Thessalon.

There are three townships in this agency open for location as Free Grants. The other townships in the agency which are open for sale under Settlement Regulations have been given in the foregoing list.

Townships open for location:

Aberdeen.	Galbraith.	Lefroy.
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St. Joseph's Island. Agent, Wm. E. Whybourne, Marksville.

This island is situated at the west end of Lake Huron. It contains nearly 86,000 acres, a large portion of which is good agricultural land. The island has been divided into three municipalities, St. Joseph, Hilton, and Joselyn. It may be reached by steamers from Collingwood or Owen Sound in summer, and in winter by the Canadian Pacific Railway.

Sault Ste. Marie Agency. Agent, Edward Noble, Sault Ste. Marie.

This Agency contains three townships which are immediately north of the Town of Sault Ste. Marie. The route from the east is by steamer from Collingwood or Owen Sound, or by the Grand Trunk Railway to North Bay and thence by the Canadian Pacific Railway to the Sault.

Townships:

Korah.	Parke.	Prince.
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Thunder Bay Agency. Agent, W. A. Burrows, Port Arthur.

This Agency contains 19 townships, in the vicinity of Port Arthur, and is reached either by steamer from Collingwood or Owen Sound, or by the Canadian Pacific Railway.

Townships:

Blake.	Gorham.	Oliver.
Comtee.	Lybster.	Palpinger.
Crooks.	Marks.	Pardon.
Dawson Road.	McIntyre.	Pearson.
Dorion.	McGregor.	Saddle.
Gillies.	O'Connor.	Stranger.
		Ware.

District of Kenora**Dryden Agency. Agent, R. H. Pronger, Dryden.**

This Agency is situated on the line of the C. P. Railway, in the township of Van Horne, and contains twelve townships.

Townships:

Aubrey.	Marrie.	Zealand.
Eton.	Sanford.	Temple.
Rugby.	Van Horne.	Watson.
Langton.	Wainwright.	Southworth.

Kenora Agency. Agent, W. L. Spry, Kenora

Kenora is situated on the C. P. Railway at the head of the Lake of the Woods. There are two townships open for location, Melick and Pellatt.

District of Rainy River

There are thirty-six townships open for location as Free Grants along the Rainy River, and two agents in charge.

Wm. Cameron resides in the Township of Morley and his Post Office Address is Stratton Station. He has eighteen townships, running from the westerly end of the River.

Alexander McFayden is Crown Lands Agent at Emo, in the Township of Lash, and he has eighteen townships towards the easterly end of the River.

These townships may be reached by the Canadian Northern Railway from Port Arthur.

Townships in charge of Wm. Cameron, Stratton Station:

Atwood.	McCroscon.	Sutherland.
Blue.	Nelles.	Sifton.
Curran.	Pattullo.	Tait.
Dewart.	Roseberry.	Tovell.
Dilke.	Shenston.	Worthington.
Morley.	Spohn.	Morson.

Townships in charge of Alex. McFayden, Emo:

Aylesworth.	Devlin.	Miscampbell.
Barwick.	Dobie.	Potts.
Burris.	Fleming.	Pratt.
Carpenter.	Kingsford.	Roddick.
Crozier.	Lash.	Richardson.
Dance.	Mather.	Woodyatt.

Provisional County of Haliburton

Minden Agency. Agent, Richard H. Baker, Minden.

This Agency contains seven townships in the Provisional County of Haliburton. The Victoria Branch of the Grand Trunk Railway runs through the Township of Snowdon, and the Irondale and Bancroft Railway through Snowdon and Glamorgan. The route to the Agency is by the Grand Trunk Railway to Gelert Station, and thence by stage to Minden Village—a distance of about 12 miles.

Townships:

Anson.	Lutterworth.	Snowdon.
Glamorgan.	Minden.	Stanhope.
Hindon.		

Kinmount Agency. Agent, Jas. Wilson, Kinmount.

This Agency contains four townships, Cavendish and Galway, in the County of Peterborough, and Cardiff and Monmouth in the Provisional County of Haliburton.

Apsley Agency. Agent, Wm. Hales, Apsley.

This Agency contains four townships in the north part of the County of Peterborough.

Townships:

Anstruther.	Methuen.	Chandos.
	Burleigh (north and south).	

North Hastings Agency. Agent, Wm. Douglas, Green View.

This Agency contains twelve townships. They may be reached from the front by the Central Ontario Railway and the *Ironlake, Bancroft & Ottawa* Railway.

Townships:

Carlow	Herschel	Wellington
Cashel	Limerick	McClure
Dungannon	Mays	Hanger
Paraday	Montezuma	Wicklow

Frontenac and Addington Agency. Agent, Chas. Both, Denbigh.

This Agency contains seven townships. The route is from Kingston, by the Kingston and Pembroke Railway, or from Toronto by the Canadian Pacific Railway.

Townships:

Abinger	Canonto, South	Denbigh
Clarendon	Canonto, North	Palmerston
Miller		

North Renfrew Agency. Agent, Finley Watt, Pembroke.

This Agency contains ten townships, which are traversed by the Canadian Pacific Railway. The route is from Ottawa or Brockville to Pembroke.

Townships:

Algona, N.	Head	Ptewawa
Alice	McKay	Edels
Buchanan	Maria	Wyle
Fraser		

Centre and South Renfrew Agency. Agent, Adam Prince, Wilno

This Agency contains seventeen townships. It may be reached now either by the Canada Atlantic branch of the Grand Trunk Ry., or the Canadian Pacific Railway.

Townships:

Algona, S.	Wilberforce	Radclyffe
Brougham	Brudenell	Raglan
Burns	Griffith	Schomberg
Grattan	Jones	Mitawachan
Hagarty	Lyell	Sherwood
Richards	Lyndoch	

The following townships are not attached to any Agency: Airy, Murchison and Sabine in the District of Nipissing.

New Townships.

New townships will be surveyed and opened for settlement in different parts from time to time as required, but it is important in the interests of the settlers as well as the province to concentrate the settlement as much as possible, so that roads may be constructed, churches and schools established, and other conveniences placed within the reach of the settlers that would not be possible where settlements are sparse, and consequently squatting in townships not opened for settlement will not be encouraged.

Authorized by

THE HON. JAMES S. DUFF,
Minister of Agriculture.

W. BERT ROADHOUSE,
Deputy Minister of Agriculture.

For information as to special colonization rates to settlers, apply to

H. A. MACDONELL,
Director of Colonization,
Parliament Buildings,
Toronto, Ontario, Canada;

Or to

RICHARD REID,
Ontario Government Agent,
163. Strand, London, England.



NOTES

The following figures for the Province are later than those that appear under "Notes" in the accompanying map of Ontario:—

The value of field crops in 1912 (Dom. census) was \$192,085,900 out of a total of \$511,951,700 for all Canada, or fully 37 per cent. as against 34 per cent. for 1911.

The value of dairy products in 1912 is estimated at \$36,000,000.

The average value of fruit crops to the retailer is estimated at \$26,100,000.

The value of live stock in 1912 was \$225,848,942.

The value of farm lands, buildings, implements and live stock in 1912 was \$1,295,050,940.

The total lumber cut in 1911 was 1,716,849 feet board measure, valued at \$30,584,724.

The total mineral production (metallic and non-metallic) in 1912 was valued at \$48,341,612.

The estimated value of the fisheries in 1912 is at least \$2,700,000.

The total expenditures of the Hydro-Electric Power Commission of Ontario, in connection with the Niagara System, for the fiscal year ending October 31, 1912, were \$4,158,829.

The completed steam railways have a total length of 10,039 miles, while electric railways have 772 miles.

The colonization roads in Northern and Southern Ontario have a total of 10,000 miles.

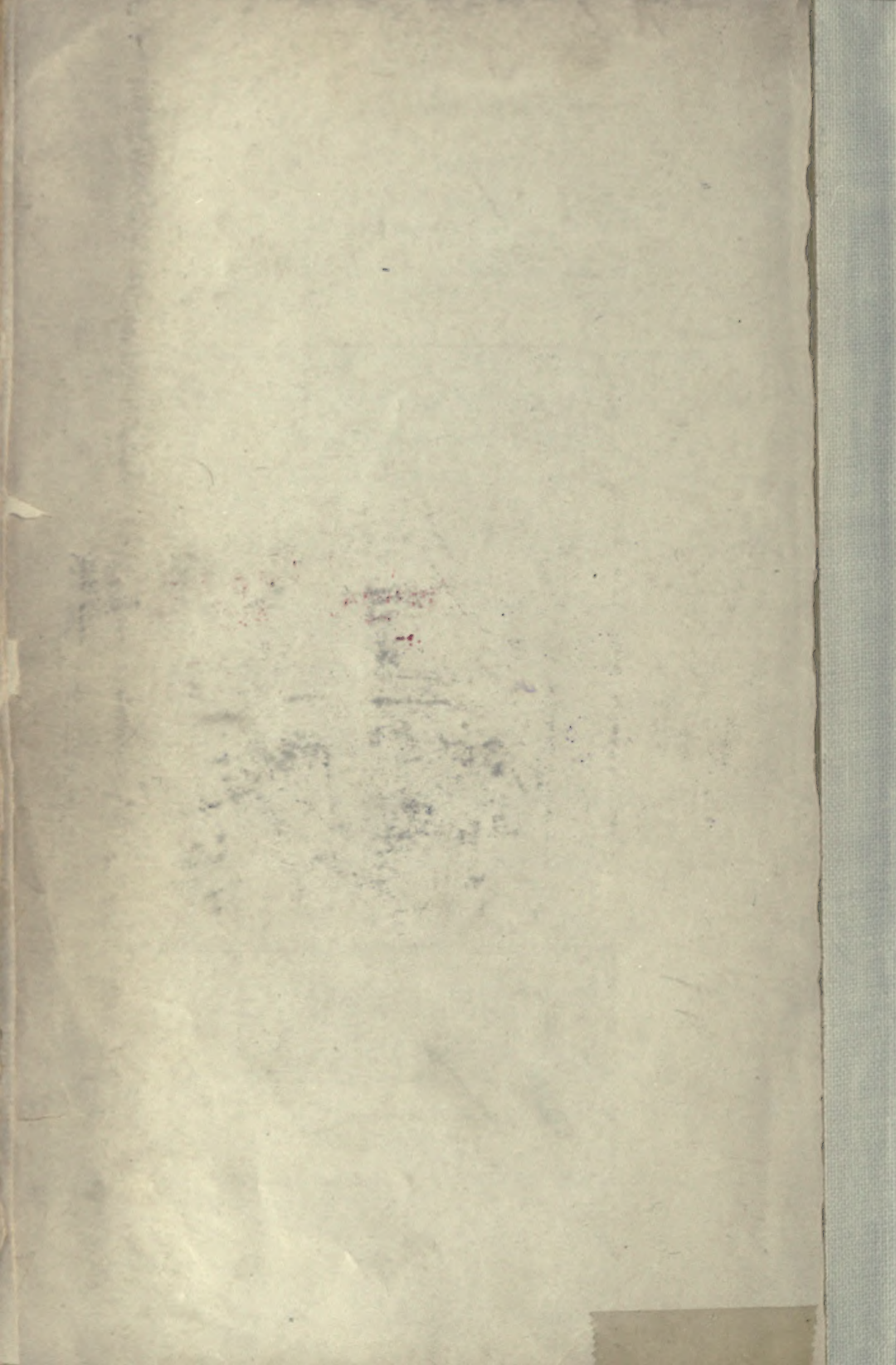
The total imports for the fiscal year ending March 31, 1913, were \$301,651,328, and the total exports were \$132,756,532.

The number of public schools (excluding secondary and others) in 1911 was 5,921, and the pupils enrolled, 400,552.

The total attendance at the Ontario Agricultural College, including Macdonald Institute, for the year 1911-12 was 1,163; for 1912-13, 1,161.

The assessment of the city of Toronto for 1914 is \$516,489,032. The population, September, 1913, is 445,575.

The aggregate attendance at the (annual) Canadian National Exhibition, Toronto, in 1913, was 1,000,000.



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Ontario. Dept. of Agriculture
The province of Ontario,
Canada

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